EXHIBIT 612

UNITED STATES DISTRICT COURT OF THE
SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

KATHY MC CORNACK, et al.,
Plaintiffs,
vs.) No. 2:09-cv-0671
ACTAVIS TOTOWA, LLC, et al.,
Defendants.

The deposition of WILLIAM L. GALANTER, M.D., Ph.D., called by the Plaintiffs for examination, pursuant to notice and pursuant to the Federal Rules of Civil Procedure for the United States District Courts pertaining to the taking of depositions, taken before HEATHER M. PERKINS-REIVA, Certified Shorthand Reporter and Notary Public within and for the County of McHenry and State of Illinois, at 10 N. Martingale Road, Suite 400, Schaumburg, Illinois, commencing at the hour of 10:05 a.m. on the 3rd day of August 2011.

A P P E A R A N C E S:

ERNST LAW GROUP
BY: MR. DON ERNST
MR. TERRY KILPATRICK
1020 Palm Street
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(800) 941-9930
(Appeared via videoconference.)

On behalf of the Plaintiffs;

SHOOK HARDY & BACON LLP
BY: MS. HUNTER K. AHERN
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(Appeared via telephone.)

On behalf of the Defendant Mylan;

TUCKER ELLIS & WEST LLP
BY: MR. EDWARD E. TABER
1150 Huntington Building
925 Euclid Avenue
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On behalf of the Defendant Actavis Totowa, LLC.

* * *

I N D E X

(Witness duly sworn.)

WILLIAM L. GALANTER, M.D., Ph.D.,

having been first duly sworn, was called as a witness herein, was examined and testified as follows:

E X A M I N A T I O N

BY MR. ERNST:

Q Would you state your full name for the record, please?

A William Galanter.

Q And you are a licensed physician in the State of Illinois?

A Yes.

Q And you have furnished to us a CV, and that CV doesn't have a date on it, but, to your knowledge, is your CV up to date?

A Yes. The date of the CV is the date of the opinion. So it was up to date as of that time.

MR. ERNST: All right. Let's mark your CV. You know, we will just shorthand this. Let's mark this CV as Exhibit 1.

(Document marked as Exhibit 1 for identification.)

BY MR. ERNST:

Q And it is your testimony that everything in

here is true and accurate?

A Correct. There is a very minor change of one of the in-press articles got published, but minor. Other than that, it is up to date.

Q Okay. That's great.

And you did a report for Mr. Moriarty, true?

A Yes.

MR. ERNST: And we are going to mark that report as Exhibit 2.

(Document marked as Exhibit 2 for identification.)

BY MR. ERNST:

Q And I have a copy of what was furnished to us. Can you hold up a copy of your report for me, please?

A (Indicating).

Q And is the top left corner dated 5/23/11?

A Yes.

Q All right. Exhibit 2, to your knowledge, is true and accurate?

A Yes.

Q And does it contain all the opinions that you intend to offer at the time of trial?

MR. TABER: Objection.

THE WITNESS: I haven't really thought about a trial.
BY MR. ERNST:
Q All right. One of the reasons for this deposition today is to make sure that I have all of your opinions that you intend to render at the time of trial, and, to your knowledge, do you have any opinions outside this report, Exhibit 2, that you intend to render at the time of trial as you sit here today?
MR. TABER: Objection, overbroad.
Go ahead.
THE WITNESS: As of this moment, no, but I assume, if this goes to trial, there might be additional information that I would read. So I couldn't venture as to what else I might want to say at that time depending on what other information becomes available.
BY MR. ERNST:
Q I understand that you may want to review other stuff.
Have you had an opportunity to review the deposition of Keith Gibson?
A Yes.

Q And you have reviewed his report?
A Yes.
Q And has it changed any of your opinions in your report that you have marked here as Exhibit 2?
A No.
Q All right. So as far as you know, as you sit here today, Exhibit 2 contains the opinions that you intend to offer at the time of trial?
MR. TABER: Objection, asked and answered.
THE WITNESS: As of this moment, yes.
MR. ERNST: All right. Thank you.
THE WITNESS: But I can't mention anything in the future.
BY MR. ERNST:
Q All right. What I would like to do is ask you what publications that you have brought with you, and in your report you listed 16 of them?
A Yes.
Q Did you bring all of those with you?
A Yes.
Q Are they in a stack with you there?
A Yes. That's all these here (indicating).
MR. ERNST: All right. What I would like to do is to mark all of those, that stack of documents,

and for each article, we are going to, for the literature reference material, we are going to mark that stack as Exhibit 3 if that's okay with you.

(Documents marked as Exhibit 3 for identification.)

BY MR. ERNST:

Q By the way, what I would like to do is to have the court reporter copy them so you have your original file back. Is that all right with you, Doctor?

A Yes. I actually have them on-line. She can have them if she wants them. I guess it is up to you.

Q That would be fine. That would be fine.

Why don't we just mark that stack as Exhibit 3, and do you have each of the articles broken out by number in that stack, Doctor?

A No, I don't.

Q Do you have them broken out by title?

A They are not broken out. They were separately printed. So it is just the title and name. They are not alphabetized or anything.

Q All right. We will mark that stack as Exhibit 3.

So if I asked you to find a specific report

in that stack, you could do that?

A Yes.

Q All right. Let's mark that as Exhibit 3.

And what other documentation did you bring with you to your deposition today?

A Well, I have my opinion, and then I have the documents shown in my opinion, but then I have additional documents that I looked at after my opinion was written.

Q And what documents are those?

A I have the deposition from Dr. Gibson and Barbieri.

Q Okay.

A I have the opinions from Dr. Gibson, Dr. Brown, and Dr. Heard or Henin, who is an ED toxicologist.

MR. TABER: Heard.

THE WITNESS: I don't remember.

Heard.

And then I have one additional paper, which was referred to by Dr. Gibson, and I got it and read it, which was Correlation of Antemortem and Postmortem Digoxin Levels. That wasn't on my initial list.

BY MR. ERNST:

Q And who is the author there?

A Vorpahl and Coe.

Q Do you agree or disagree with the conclusions that Vorpahl and Coe published in that article?

MR. TABER: Objection, overbroad.

THE WITNESS: I disagree with them in terms of in their scope of generalities, but I don't suspect that they did anything immoral in their ethics. Their science, though, I think are probably the results of their study in their patient population.

MR. ERNST: All right. Let's mark that Vorpahl and Coe article as Exhibit 4, okay? Can we do that?

THE WITNESS: Is that a question to me?

MR. TABER: That's fine. Sure.

MR. ERNST: That's for the court reporter.

(Document marked as Exhibit 4 for identification.)

BY MR. ERNST:

Q So let's go to exhibit -- what other materials have you read following your report, Doctor?

A Just what I gave you just now, the list that

you asked me; the two depositions, the three opinions, and the one paper.

Q All right. Have you had a chance to review the deposition of Dr. Lemm?

A Yes.

Q And Dr. Mason?

A Yes.

Q And Dr. Von Dollen?

A Yes.

Q Dr. Lemm concluded that Mr. McCornack died of digoxin toxicity. Are you aware of that?

MR. TABER: Objection. Could you give us a page cite?

THE WITNESS: Yes, let me look at his deposition.

MR. TABER: What page?

MR. ERNST: Well, if you don't remember, you don't remember.

BY MR. ERNST:

Q I guess a better question is: Do you disagree with the opinion of Dr. Lemm about the cause of death?

A If you tell me where the opinion is, I can look at it.

Q No. Actually, I get to ask the questions, and one of the questions that I have is: Are you aware that Dr. Lemm concluded that Mr. McCornack died of digoxin toxicity?

A No. I actually don't remember which doctor said which.

Q Are you aware that -- well, if Dr. Lemm said that, do you disagree with that?

MR. TABER: Objection. If you would like to refer to the document, I would respectfully ask counsel to tell us what page you are citing; or, if you are not citing, fine, please rephrase your question.

MR. ERNST: My question stands.

MR. TABER: We do have his deposition here.

MR. ERNST: You know, I know you do.

BY MR. ERNST:

Q But the question that I have is: Do you disagree with Dr. Lemm's statement that Mr. McCornack died of digoxin toxicity?

MR. TABER: Objection.

THE WITNESS: I disagree with the statement that he died of digoxin toxicity. I would only disagree with Dr. Lemm if I was a hundred percent sure

that that's what Dr. Lemm said.
BY MR. ERNST:
Q And you are aware that Dr. Mason concluded that Mr. McCornack died of digoxin toxicity?
MR. TABER: Objection. Same basis.
THE WITNESS: Yes, that's my recollection on his second opinion, on his amended opinion.
BY MR. ERNST:
Q And you disagree with that?
A Yes.
Q Now, do you perform autopsies?
A No.
Q What are the job duties of the coroner?
A I don't know all the job duties. I'm not in pathology. I know that they perform autopsies on certain patients based on laws in the particular area if they have suspicion that it wasn't something natural, if there is no doctor that can give a cause of death, or if the patient or family wants an autopsy. I have asked families if they want to get an autopsy in the hospital.
I assume that part of what they do is to do autopsies, and describe their findings, and give opinions as to the cause of death as part of their

job.

Q Have you ever performed an autopsy?

A No. I have been in the room and watched when I was a student, but, no, I haven't performed an autopsy.

Q You are aware that the physician that performs the autopsy has the duty to determine the cause of death after examination of the body during an autopsy?

A That is what I assume. I have never read that law or anything, but I assume that that's their job.

Q And you are a professor of internal medicine?

A Not a full professor. I'm an assistant professor.

Q Let's circle back, and I want to ask you what your roles -- strike that.

Please state for me what your understanding is of why you were retained.

A I think I was retained because I had a variety of different bits of expertise as relating to this case as it was germane to digoxin, which is something I know a lot about. I'm also a practicing

clinician, and I also do research on medication safety, and I use the drug. So I think there were multiple things about me that made me of interest to Mr. Taber and his firm.

Q Please state for me what you understand what your purpose is as an expert.

A What's my purpose? It is to look at all the information and to make an opinion of what I think happened.

Q Did you have a physician/patient relationship with Mr. McCornack?

A No.

Q And, to date, can you tell us how much you have billed Mr. Moriarty's firm; Tucker, Ellis & West?

A I actually just gave it yesterday. I don't know if Mr. Taber sent that to you, but I think it is around $12,000. There is an exact amount. I apologize. I didn't bring it.

THE WITNESS: You probably have it, right?

MR. TABER: Yes.

THE WITNESS: I e-mailed it yesterday to Mr. Taber. I apologize. I didn't print it and bring it. It is something in that number.

BY MR. ERNST:

Q Around that number?

A Yes.

Q All right. In that report that is dated 5/23/11, marked as Exhibit 2, did you discuss this report with anyone before you drafted it?

A I guess it depends on what you mean by draft. The initial draft, no, I didn't discuss with anyone.

Q And you sent the draft to Mr. Moriarty?

A I believe so. I'm not a hundred percent sure, but I believe so.

Q And then Mr. Moriarty suggested changes in your report?

MR. TABER: All right. Hold on. Objection.

MS. AHERN: Objection.

MR. TABER: That's work product. As you know, under the new federal rule, you can't get into that. There is no discovery permitted on drafts and discussions about drafts. So let's not waste any time today. We will not permit inquiry into something the rules do not permit.

BY MR. ERNST:

Q What I would like to do is look at

Exhibit 2, and I just want to make our record clear here.

Please state for me, looking at Exhibit 2, what suggestions Mr. Moriarty made in your report.

MS. AHERN: Objection.

MR. TABER: Objection. I'm going to let him answer --

THE WITNESS: Is that true of my opinion?

MR. TABER: Yes. Your letter. That's right.

THE WITNESS: I wouldn't actually know. This is my final opinion.

BY MR. ERNST:

Q So it is your testimony that your final opinion was discussed with Mr. Moriarty and suggestions were made by Mr. Moriarty before your final opinions were rendered, true?

MR. TABER: Objection, and that is not an appropriate subject of inquiry as you know. Please ask your next question because we are not going to permit inquiry, as I just stated, into issues that are not permissible under the rules. This is the same position that I believe all counsel have taken with experts. So we will be consistent.

THE WITNESS: Answer or not answer?

MR. TABER: You do not need to answer that question because he is not allowed to ask you that question, which he knows.

BY MR. ERNST:

Q Well, I guess the question that I have is: In your final report, Exhibit 2, without telling me what they were, suggested changes were made by Mr. Moriarty, true?

MR. TABER: Objection, same basis. Maybe if you could just tune up your question a little bit, Don, and ask him if it is his authorship or did someone else write the report for him, I think that would be appropriate and fine.

MR. ERNST: No. I will have my last question reread, which I do think is appropriate under the rules, and I will just ask him to answer the question.

Can I have the last question reread, please?

(Record read.)

MS. AHERN: Objection.

MR. TABER: Objection.

You can answer.

THE WITNESS: Yes, he looked at it. He

suggested parts that he wanted to make me sure that that's what I really meant or didn't mean, some grammatical errors that I made, and things that he wanted to verify if that's the way that I really wanted to say them, and what implications that might make about the way that people would interpret the report. He didn't suggest specific sentences to put in or anything like that.

BY MR. ERNST:

Q Well, what areas was he concerned with?

MR. TABER: Okay. We are not going to permit any further inquiry on this. As you know, Don, your questions are inappropriate. There was a federal rule change over a year ago that specifically says we are not to do discovery on this issue. We have respected that rule when we have deposed your experts. I would ask you to do the same. You are wasting everyone's time now.

MR. ERNST: Actually, that's not accurate. Those questions were asked of my expert, and I permitted them to be answered.

MR. TABER: Which depo?

MR. ERNST: Gibson.

MR. TABER: I respectfully disagree.

MS. AHERN: I do as well.

THE WITNESS: Answer or not answer?

MR. TABER: You do not need to answer that because he is not allowed to ask you that. He knows that.

BY MR. ERNST:

Q Do you have correspondence from Mr. Moriarty to you, Dr. Galanter?

A No, I don't.

Q Can you describe for me the circumstances under which you were hired; in other words, who called you?

A It was actually quite a long time ago. My recollection was that I was asked to review a different case from a different lawyer, and then after that, after I started reviewing that, then I was asked to get involved with this case. That's my recollection. It was, actually, probably two-and-a-half years ago or so, but I think there was a different case first that I was looking at, and then that lawyer asked me to talk to another lawyer about this case, and that was Mr. Moriarty, and that was sometime in 2009.

Q And what did Mr. Moriarty tell you about the

reason he wanted you to testify?

A I actually, quite honestly, don't entirely remember, but it was more he asked me about my qualifications, and if I would review some material form, and he started to send me some medical records. I think I reviewed medical records first and the death certificate in one big folder, and I didn't have any depositions. I want to apologize: I just don't have a clear memory. That was quite a while ago.

Q Okay. Let's go back.

Were you asked to render an opinion on the cause of death? Is that the reason, your understanding, of why you were hired?

A I don't know why I was hired, but later, when I wanted to put my opinion together, I am not -- I don't do expert witnessing as a business. So I did talk to Mr. Moriarty about what needed to be in my opinions.

Q And I just want to try and be clear: What is your understanding of what you were hired to do?

A I think I was hired to read all the materials and to provide an expert opinion about my beliefs on the materials; cause of death, medical illness, a variety of different things. They were

looking for my expertise and my opinion of what actually happened in the case.

Q All right. Let's go look at some of those opinions, okay, Doctor?

A Sure.

Q Now, let's go through, first, a couple of things. I want to make sure that you have furnished to me all of the materials that you have received, and you don't have any retention letters from Mr. Moriarty or his firm?

A I wasn't hired on a retainer.

Q I'm sorry?

A I wasn't hired on a retainer.

Q Did he send you a letter saying he wanted you to look at materials?

A Sure, something like that.

Q Do you have that letter with you?

A No, I didn't bring those letters. I apologize if I was supposed to. I was advised I was supposed to bring information related to my opinion, and those letters didn't have anything clinical on them. They were just he sent a letter saying: "I'm about to send you a big package. I just wanted to let you know" or "I have more stuff coming," things like

that. So I apologize. I actually didn't even save them. There wasn't anything clinical on them. There wasn't information on the letters.

Q Wasn't there a list of the material that he was going to send you?

A Yes, and then after I got the material, I threw them out. Sorry.

Q So you threw out the correspondence from Mr. Moriarty?

A Except those that were e-mailed.

Q Do you have those e-mails printed out?

A No, I don't. I apologize. Again, I was advised that I need to bring information germane to my opinion.

Q Have you reviewed the deposition notice that was forwarded to you?

And let's mark that as next in order, which I think is 5.

A Yes. I'm not a hundred percent sure I brought it.

MR. TABER: Don, I have a copy if you want me to hand him my copy. It is a little marked up.

MR. ERNST: That would be great. Thank you.

MR. TABER: Sure.

This is the amended one that was just sent out on Friday?

MR. ERNST: Yes.

(Document marked as Exhibit 5 for identification.)

MR. TABER: And he and I both went through that last night. If you want me to address anything, I would be happy to as well.

MR. ERNST: Well, I think Item 3 is important. It says: "All other documents prepared by the attorneys for the Defendants and sent to the witness."

MR. TABER: And everything that is discoverable has been either identified for you both or produced, and to the extent that the enclosure letter is saying "Please find enclosed X, Y, Z" have not been produced, if you really want them, that's fine, but it is my understanding that the civil rule says that only those things that are relied upon by the expert in forming their opinions are discoverable, and you have all that. So that's why we have not given you the "Please find enclosed" letters.

If it is a big deal, I don't have a problem with that, as long as it is even-handedly done for all

experts, but whatever.

MR. ERNST: Well, we asked for all correspondence and communication between the witness or anyone acting on the witness's behalf, the attorneys representing the Defendants in this MDL/Digitek litigation under Item 2. I have never had letters from the lawyers not be disclosed.

So here is what I would propose: There may be questions that I wish to ask, but I can't say without looking at the correspondence, but we received no objection, and I believe that we are entitled to have the letters that were sent from Mr. Moriarty or his firm and the e-mails that were sent from Mr. Moriarty or his firm to this witness.

MR. TABER: And have you produced all of those from all of your witnesses to us?

MR. ERNST: Yes, we did.

MR. TABER: Are you sure about that?

MR. ERNST: Yes.

MR. TABER: Okay. If you believe that there is something that is discoverable that you are entitled to, say whatever you want, but just because you asked for something doesn't mean you are entitled to it if the rules say you are not entitled to it.

Again, ask him about it. Ask him if he relied upon anything in those letters if you want. This is your opportunity. So let's go ahead and get into the case and stop wasting time on enclosure letters. The list in his report tells you what he reviewed and what he relied on.

MR. ERNST: We are not wasting time. The issue is I want to know what Moriarty said about the case in the original letter, and we have other letters that he sent to Dr. Heard, for example, that contain detailed facts, and I suspect that these letters do as well. Without having seen them, and just by not producing them, we are behind the eight ball as to what was communicated by Mr. Moriarty initially.

Here is what I would propose: I would propose that you have copies of the retention letters, that those retention letters be furnished to us via e-mail today. If you have them, and you can have your office e-mail them to us, we will question this witness before the close of this deposition if that is possible for you to do.

Perhaps you can call your office and just have them e-mailed.

MR. TABER: I'm not going to stop the depo

to do that. Why don't we press on, and I will make a call and inquire as to whether that is an arrangement that is suitable and that Plaintiffs have honored as well.

Based on your word that you have produced all this stuff for all of your experts, I will make a call at the next break, but let's push on and get moving with the depo, instead of holding it up for something that's not going to make any difference today.

MR. ERNST: Well, we are moving with this depo, then.

MR. TABER: Let's go then. Let's talk about the case.

BY MR. ERNST:

Q What else is contained in your file, Dr. Galanter, that you brought with you today that we have not already discussed?

A Nothing. It is the materials reviewed, plus the additional materials reviewed that I went over at the beginning; the two depositions, the three opinions, and the one additional paper.

Q All right. Let's ask you some questions about Mr. McCornack. In your opinions, you write that

his medication consumption was reliable; is that accurate?

A What page are you at?

Q It is on Page 3, under opinions regarding the cause of death.

A Yes, I said it was likely reliable, and the answer is, yes, I think from looking at his digoxin levels over the years from his visits and the stability of his medications, compared to the average patient, my guess is that he was, most likely, a reliable patient in terms of his medication use.

Q What do you mean by "reliable patient"?

A Well, roughly -- I don't know on the average, but somewhere between 5 and 15 percent of medications prescribed to patients are not taken on the average, and no one takes a hundred percent of their medicines. So when I'm saying reliable, I don't think there is a standard for it, but I'm saying he probably took 90 to 95 percent of the medicines given to him in a manner, and that's a guess, and that's why I used the word "likely". I don't think, from reading the record, he was a person that blew off his medications all the time.

Q So what you mean is that he was compliant in

taking his medication?

A Reasonably compliant. I don't think there is such a thing as a patient that is a hundred percent compliant. That's what the literature suggests.

Q What you mean is that in review of the records, it came across that he took his medication on a regular basis, and took it as directed by his physician, true?

A Yes.

Q And there is no evidence that he, in the weeks or days or hours before his death, took any double doses or anything of that nature, true?

A There is no evidence in the records given to me of that.

Q Okay. There is some Diltiazem that was mentioned in the toxicological report taken after his death?

By the way, do you have that report from NMS Labs?

A Yes, I do.

MR. ERNST: Let's mark that as Exhibit 6.

THE WITNESS: Sorry. If you could give me a minute to grab it?

Okay. I got it.

(Document marked as Exhibit 6 for identification.)

BY MR. ERNST:

Q And looking at Exhibit 6, there was diltiazem and digoxin present in his bloodstream after death, true?

A Yes.

Q But you concluded that his diltiazem was within the normal range for what you would expect?

A No, I don't know what to expect postmortem at that time.

What page are you referring to of my opinion?

Q I believe that you concluded on Page 4 that he was not toxic from diltiazem.

A I'm reading through that paragraph. One moment.

I'm not sure that I quite said that in that paragraph. I do believe that, though, but I don't think I said that in the paragraph there.

Q All right. Let's go through it.

You believe he was on a stable dose of both digoxin and diltiazem, true?

A Yes.

Q And you do not believe that the diltiazem had any causative factor on his death, true?
A That's nowhere in there.
Q Well, I'm asking you if that's your opinion.
A Well, since his autopsy did not show an absolutely conclusive cause of his sudden death, there is a lot of different possibilities. So it depends on what you mean when you say do I believe with a hundred percent or 99 percent. He didn't have an absolute. Like if somebody has a big MI on their autopsy, then you know it is a big, fresh MI, and his autopsy did not show a completely definite foolproof diagnosis.
Q When you said "MI" you are talking about myocardial infarction?
A Yes. Sorry.
Q And for a layperson, that means a heart attack?
A Yes.
Q Now, I guess I'm asking your opinion today, which is do you believe that the diltiazem had any part in the cause of the death of Mr. McCornack?
A Within a reasonable certainty, no.
Q Now, Mr. McCornack's digoxin level, when tested by NMS Labs, was 3.6. Do you see that?

A Yes.

Q And from a clinical standpoint, you have experience in prescribing and monitoring patients taking digoxin medication, true?

A Yes.

Q And from a clinical standpoint, the level that digoxin is acceptable in the literature is from .5 to 2.0 nanograms per milliliter?

MR. TABER: Objection.

THE WITNESS: I would say generally different labs have different normal ranges and different levels have come in and out of vogue. So I would say, roughly, what you are saying is true, but some labs say 2.2, some say 2.4, some say 1.8. So, roughly, I agree with you, but it really depends on the lab.

BY MR. ERNST:

Q So based on your testimony, what I hear you saying is that the therapeutic levels are from .5 to a range of 1.8 to 2.2; is that true?

MR. TABER: Objection.

THE WITNESS: Yes.

BY MR. ERNST:

Q Now, the digoxin level of Mr. McCornack,

when tested, was 3.6, true?

A Yes.

Q Now, one of the articles that you read and reviewed actually traced back a postmortem blood level to a blood level at the time of death. Do you recall reading those articles in your list of literature?

A Yes.

Q And, as you sit here today, as a physician, when a blood sample is taken postmortem and a digoxin level is determined, that is information that you, as a physician, want to know, true?

MR. TABER: Objection.

THE WITNESS: No, I'm not a coroner. So as a clinician, no. I don't think I have ever recalled looking at postmortem digoxin levels in treating patients. So the answer is no.

BY MR. ERNST:

Q So from your standpoint, as a treater of live patients, digoxin level after death doesn't mean anything to you because you don't treat patients after they die?

A Right.

Q However, from a scientist's point of view -- and you are trained as a scientist, true?

A Yes.

Q -- a blood level of 3.6 nanograms per milliliter of digoxin after death means something; doesn't it?

MS. AHERN: Objection.

THE WITNESS: What I found is it means something when it is low because the literature says it goes up after death. So if it is low after death, that would mean, with almost clear certainty, that it would be low before death. So I think the value does have meaning when it is low because it would very conclusively predict low levels before death.

What the literature says when it is high is there is a whole range of how high it gets based on how long you waited, what part of the body. So when it is high, I guess all I can say is he was taking at least some of his digoxin, and I can't prove that it was low, that his level was low during life, and that's probably all I can make of the value.

BY MR. ERNST:

Q What you can state is that 3.6 nanograms per milliliter is above the therapeutic level, true?

A In a live patient, yes.

Q And following death, do you have an opinion

as to whether or not, with a 3.6 nanograms per milliliter digoxin post death, do you have an opinion as to whether or not that's toxic or not toxic before death?

A No, because the literature, some papers say it could be ten times higher after death, some papers say it is two times higher. It depends how long you wait. It depends on where you pull it from.

Q Right.

A So the literature, it is very complicated. There is more variables than is in the literature.

Q So what I hear you saying is that this is not something that you usually look at, render opinions about, or work with, true?

MR. TABER: Objection.

MS. AHERN: Objection.

THE WITNESS: Usually, no.

BY MR. ERNST:

Q And this is something that you would defer to a coroner to look at because that is what they usually do? They determine cause of death, true?

MR. TABER: Objection.

THE WITNESS: I don't look at cause of death. I don't look at the coroner's report in my

typical work. I was asked to give an opinion. So I looked at it because it was a piece of data in the material that I was asked to give an opinion about.

BY MR. ERNST:

Q Now, this piece of data does have meaning to you; doesn't it?

A Yes, it does, because it has good negative -- I don't know if you are familiar with the term negative predictive value, but what is true is every article says it goes up after death. So if his digoxin level was 1 after death, then I would be pretty sure it was less than 1 before death, which would have told me that he wasn't compliant with his medicines. So it has good negative predictive value for compliance.

Q Doctor, do you know what the burden of proof is in a civil case?

A No.

Q It is more likely true than not true.

A Okay.

Q Are you aware of that?

A No. I mean, I am now after you told me, yes.

Q Now, looking at one of the articles that you

have, and I think we have marked it as Exhibit 6, the Vorpahl article, can you pull that out?

A Yes. Sure. One moment.

I got it.

MR. TABER: I thought that was Exhibit 4.

BY MR. ERNST:

Q Now, you have reviewed that, true?

A Yes.

Q And this article was attached to a number of other depositions that you reviewed, true?

A Correct.

Q Now, one of the things in the --

A Well, let me go back on that. I don't remember if it was attached to more than one deposition. I know it was attached to at least one deposition.

Q All right. If you go to Page 333 of the Vorpahl and Coe digoxin level --

A Give me one second. I have got to put my glasses on.

Q And you go to the summary?

A Okay.

Q Do you see that there was a mean postmortem value given to pre-death levels of digoxin?

A A ratio, yes, I see.
Q A ratio?
A Yes, in the second sentence.
Q And, in fact, this was a study done of 27 people where they knew the pre-death levels of digoxin and post-death levels of digoxin, true?
A True.
Q So they were able to actually measure what the digoxin level was before death and then after death, true?
A No. They actually didn't measure before death. They calculated using the Jelliffe equation.
I'm sorry, they measured sometime before death, and then they presumed the time immediately premortem based on a calculation.
Q And what calculation did they use, Doctor?
A I think it was a Jelliffe equation. I'm not sure.
Q Have you ever used that equation?
A It is referenced by Jelliffe, No. 13.
No, I haven't used that equation in my clinical work. I know of it through research and through writing, but I haven't used it.
Q And it is commonly relied upon?

A I actually don't know clinically if it is or it isn't because I'm not a pharmacist.

Q So when Dr. Mason, the coroner, took blood from Mr. McCornack, he took it from an extremity, true?

MR. TABER: Objection.

THE WITNESS: That's questionable, because in the literature there is some classic locations, and he didn't take it from one of the classic locations. So it is probably some mix of an extremity and the heart because I don't think there is any -- give me one second.

Yes, they didn't look at axillary draws in this study. So I would assume that some combination, some average between subclavian and femoral, because the subclavian is more proximal.

BY MR. ERNST:

Q If you assume it is an average between subclavian -- just for the record, "subclavian" means what to you, Doctor?

A Subclavian vein under the clavicle, right here (indicating).

Q And the femoral vein means out of the leg, true?

A Actually, I don't know what the femoral vein means because the femoral vein is extremely long. So maybe there is a standard draw in autopsies that I'm not familiar with. The femoral vein is very long.

Q You are aware that Dr. Mason, when he did the autopsy, he cut the vein in the shoulder and then pressed the blood out from the wrist down. Do you recall that?

A That's what he said, yes.

Q So that's why you think that, for purposes of this study, it would be an average between the subclavian vein and the femoral vein, true?

A Yes.

Q So if you --

A It is in their study, not necessarily in our patients. In their study, I would assume, if they did axillaries, it would probably be some average between subclavian and femoral in their study.

Q Well, wouldn't that turn out to be probably 1.5, 2.5 if you did the average?

A Sure. Their error is much, much larger than that, but that's close enough. They have a very large error there.

Q All right. So if you took the average, if

you took the 3.6 nanograms per milliliter, and you factored in for 1.5, using the Vorpahl article as a basis, what would be the pre-death level of digoxin in Mr. McCornack?

MR. TABER: Objection.

THE WITNESS: I didn't do that because Mr. McCornack wouldn't qualify for that study because his sample was drawn three days after, and that study was done on patients with an average of ten hours after, and the literature says the amount of time matters. So I don't think Mr. McCornack's premortem level can be calculated using this paper because, this paper, no one in this paper was remotely close to that time.

BY MR. ERNST:

Q Do you have any literature studies that say that 72 hours is different than 10 hours post death?

A Definitely not. I didn't find any study that specifically mentioned the two times.

Q All right. Well, I want you to compute, because you are a physician that would do something like this, please tell me if you assume a 3.6 nanograms per milliliter post death, and you used a factor of 1.52 as an average between the subclavian

vein and the femoral vein, please state for me what the level would be for Mr. McCornack using the numbers in the Vorpahl study.

MR. TABER: And I'm going to object because he just told you that that would not make any sense. So you are asking him to make three assumptions, none of which he agrees with. So I object and ask you to rephrase your question based on his prior answers.

MS. AHERN: Join.

MR. ERNST: You know, under Pretrial Order 22, that's what we call a speaking objection, and I have tried to refrain from doing that. If you want to make an objection, you can. I'm asking him to do the computation.

MR. TABER: That's fine. You can do it, too. If you want to pull out a calculator, go ahead, but he just told you that doing what you are asking him to do would make no sense. So if you want us to divide two numbers, that's fine.

BY MR. ERNST:

Q Look at the Vorpahl study, and assuming that it is accurate for Mr. McCornack's blood sample, if you compute it back to the antemortem or pre-death level, wouldn't it be 2.5 or greater?

MR. TABER: And I object because the assumption, he just told you, is completely false.

Go ahead.

THE WITNESS: I can try to get into detail on this.

So there is a couple of issues. If you look at their end for femoral, they actually have about 12 points. So for funsies, I kind of looked at the numbers and looked at the range, and I can guarantee you that the standard deviation on those ratios is extremely large.

BY MR. ERNST:

Q I'm asking you for the number --

A You are asking me to do something that I don't think is true and I told you is not true. So I cannot put Mr. McCornack into the Vorpahl study.

So if you ask me a math question that has nothing to do with this deposition, I would say 150 percent of 2.4 is 3.6, as a math problem, but I don't think it has anything to do with the particular patient we are talking about.

Q If you use the Vorpahl numbers that are contained in the study, and you compute it back to pre-death levels, even though you may not agree with

it, Doctor, the level comes out to be 2.4, true?

MR. TABER: Objection, same basis. He already answered that.

THE WITNESS: And the answer is, yes, if I do a math problem that I don't agree with, I come up to the same conclusion every time of 2.4.

BY MR. ERNST:

Q And you already testified that 2.4 is above any level that any lab considers to be acceptable, true?

MR. TABER: Objection.

THE WITNESS: No, I didn't say that. I would venture a guess and say it is probably true, but I haven't done a review of all labs.

BY MR. ERNST:

Q Didn't you specifically state that the therapeutic level is between .5 and generally 2.0, and once in a while it goes as high as 2.2?

MR. TABER: Objection.

THE WITNESS: The answer is, yes, I said that, and that was an effort to try to get around the fact that you were giving an exact number, and I couldn't give you an exact number.

But now if you ask me to say that I

specifically know that no lab goes up to 2.4, I really haven't done a review of lab ranges to say that.

BY MR. ERNST:

Q Will you acknowledge that 2.4 from a clinical standpoint would give you cause that it could be toxic?

MR. TABER: Objection.

THE WITNESS: The answer is, yes, in the live patient, I could be concerned with 2.4 if the patient had other symptoms.

BY MR. ERNST:

Q All right. So, in summary, if you use the Vorpahl study, and you average the subclavian vein with the femoral vein numbers, and you backtrack from the post-death level of 3.6, you will come up with 2.4. Whether or not you agree or disagree with that, that is the number, true?

MR. TABER: Objection.

MS. AHERN: Objection.

MR. TABER: Multiple levels.

THE WITNESS: I would agree, in a patient who had blood drawn in the time frame of their study, that would fall into their result.

MR. ERNST: All right.

BY MR. ERNST:

Q So from your point of view, as an expert in this case, a digoxin blood level of 3.6 nanograms per milliliter after death does have meaning, true?

MR. TABER: Objection. He answered that same question, Don, if you will recall, about 30 minutes ago at least three times.

THE WITNESS: The answer is yes, and I will break it into a couple of pieces.

The fact that he had digoxin in his blood postmortem meant that he was taking digoxin. So it excludes the possibility that he wasn't taking his medicine at all, and because it wasn't extremely low, it suggests that he wasn't completely non-compliant with his medicine. So the answer is yes with those specific examples.

BY MR. ERNST:

Q Will you acknowledge that there have been a number of studies that have computed to be pre-death levels of digoxin from postmortem samples of blood?

A The answer is I don't know. I have seen this one study. The reason I looked at this study is because it was referenced by Dr. Gibson. Most of the studies I looked at said that you can't predict, that

it is too unreliable.

I couldn't say that I did a complete and thorough literature search. So I couldn't guarantee that I might not have missed a study in rats or something. So I guess I'm not comfortable saying absolutely not, but the literature that I looked at, with the exception of this paper, suggested that you can't guess a premortem level based on an antemortem level because it is unreliable and it is always higher.

Q Looking at your report, Footnote 13, do you see that, Doctor?

A Yes. One moment.

Yes.

Q That's the Koren article; do you see that?

A Yes.

Q And let's go down to Item 15. That's the O'Sullivan article?

A Yes.

Q And, in fact, you quote an article here, and the title of it is Differences in Digoxin Concentrations Between Antemortem Serum and Femoral Postmortem Blood. Do you see that?

A What number is that?

Q Item 15.
A Oh, differences in those four, yes, amiodarone, digoxin, flecainide and sotalol?
Q Right.
A Yes.
Q And you are aware that that is a study of one patient?
A Can you hold on a second? I want to get the article.
Q Sure.
A Too many articles.
Okay.
Q And, in fact, that article specifically works out a level of digoxin from a postmortem sample and concludes what it was before death; isn't that true?
A I actually only have the abstract with me.
Q You know, I see that you have listed it as Item 15. Is it your testimony that you just read the abstract and not the entire article?
A No. It is my testimony that I couldn't find the article now to print out again.
Q Well, doesn't the abstract state that, in fact, you can compute pre-death serum levels from

postmortem blood?

A They are claiming that in this one patient.

Q Right.

They are claiming that, but that's an article that you cited, true?

A Okay. Yes.

Q And in that article, they say that you can conclude what pre-death levels were of digoxin from postmortem blood; isn't that true?

A They said that the high level would have suggested that it could have resulted from.

Q So there is a bunch of literature out there that says that you can conclude, from your own list of materials here, that, in fact, you can conclude what pre-death levels of digoxin were from a postmortem test, true?

MR. TABER: Can you repeat the question?

Or do you want to read it back?

(Record read.)

MR. TABER: Objection.

THE WITNESS: The answer is absolutely Vorpahl and Coe claim that they can predict a premortem level of digoxin before death. That's the point of their article.

BY MR. ERNST:

Q Well, doesn't the article that you cite as Item 15, the O'Sullivan article, also claim that?

A Well, but that was a case study.

Q Right.

But the case study concluded that; didn't it?

MR. TABER: Objection.

THE WITNESS: They concluded that a postmortem level could suggest that the drug was associated with the death, with premortem.

BY MR. ERNST:

Q Let's go back and talk about the death of Mr. McCornack.

A Okay.

Q Now, you have concluded that Mr. McCornack died of -- I think what you called -- sudden cardiac death; is that true, or sudden cardiac arrest?

A Yes.

Q Why don't you explain sudden cardiac arrest to me as if I were a layperson.

A Let me get a paper. If you could give me one moment? Too many papers.

MR. TABER: Take your time, Doctor. We are

in no rush here.
BY MR. ERNST:
Q I am looking at your report that you have opined, and on Page 3 you state: "The cause of his death was" --
A Do you want that answer?
Q I'm sorry?
A Is this another question or would you like an answer to the first question?
Q I would like an answer to the first question.
A So this is from something called Up-to-Date, which is an on-line referential material. It is No. 5.
Q Okay.
A And it says: "Sudden cardiac arrest and sudden cardiac death refer to the sudden cessation of cardiac activity with hemodynamic collapse typically due to sustained ventricular tachycardia/ventricular fibrillation." So that's the definition of sudden cardiac arrest.
Q So ventricular fibrillation to a layperson means that the lower half of the heart stops beating?
A It means it is vibrating and it can't

sustain. It is not pumping. It is beating, but it is beating so fast that it can't pump.

Q And it is your opinion that he died of sudden cardiac arrest, true?

A Yes.

Q Now, let's talk about digoxin toxicity. Can digoxin toxicity cause sudden cardiac arrest?

A Yes. It is one of the side effects.

Q So when your opinion has concluded that Mr. McCornack died of sudden cardiac arrest, one of the things that could have caused the sudden cardiac arrest was digoxin toxicity, true?

MR. TABER: Are you asking him if that's his opinion?

MR. ERNST: I'm asking him generically --

MR. TABER: All right. Objection.

MR. ERNST: -- if digoxin toxicity can cause sudden cardiac arrest.

THE WITNESS: I thought that was the last question.

MR. TABER: Can or in this case? Which are we talking about?

MR. ERNST: I'm asking if it can.

THE WITNESS: That, as I recall, was two

questions ago, and the answer is I said, yes, digoxin toxicity can cause sudden cardiac arrest.

MR. ERNST: All right.

BY MR. ERNST:

Q Now, one of the things that you have testified to is that digoxin can cause atrial fibrillation, true?

A No. Typically, digoxin is used to treat atrial fibrillation.

Q And if there is an excessive amount of digoxin, what happens to the fibrillation?

A Well, the atrium still fibrillates, so it is a little bit confusing. Digoxin doesn't actually affect atrial fibrillation. It affects the ventricles response to the atrial fibrillation.

Q Okay. Now, would you agree that digoxin toxicity causes bradycardia?

MR. TABER: Objection, overbroad.

THE WITNESS: Bradycardia is one of the side effects of digoxin toxicity.

BY MR. ERNST:

Q And, for the record, bradycardia is a slowing of the heart rate, true?

A Actually, it is a little bit confusing

because bradycardia is typically defined as an abnormal slowing of the heart rate. So if you exercised, and your heart rate was high, and then you rested and it went down, people wouldn't call that bradycardia. So bradycardia is typically defined as a heart rate under 60.

Q It is an abnormally slow --

A Right. It is not a slowing of. It is an abnormally slow.

Q Now, Mr. McCornack, on the day of his death, complained of fatigue; do you recall that?

A No, I don't.

Could you tell me where that is?

Q Do you recall that Mr. McCornack complained of bloating?

A I recall that that was in his wife's deposition, yes.

Q Do you recall in his wife's deposition that he was tired?

A I don't.

Q Isn't it true that fatigue and gastrointestinal distress are symptomatologies of digoxin toxicity?

MR. TABER: Objection, overbroad.

THE WITNESS: The answer is yes. Digoxin toxicity has a whole variety of symptoms, cardiac and extracardiac, and fatigue and GI side effects are common symptoms of digoxin toxicity. Not always present. Sometimes present.

MR. ERNST: Right.

BY MR. ERNST:

Q Sometimes they are there and sometimes they are not?

A Right.

Q Now, as a treater -- and you do treat patients, true?

A Yes.

Q When a person claims they are bloated, is that sometimes referred to as gastrointestinal distress?

MR. TABER: Objection.

THE WITNESS: The answer is no. Medically, "distress" has a connotation of something that is relatively severe; respiratory distress, gastrointestinal distress. So I don't hear people using distress for something like bloating.

BY MR. ERNST:

Q All right. When a person says they are

bloated, what does it mean to you as a clinician?

A They have an uncomfortable feeling in their stomach that they are associating with a feeling of being overfull from gas or food or something like that.

Q All right. Would you consider bloating a symptom of digoxin toxicity?

A The answer is I don't know because it is not typically described in the literature as bloating. So I actually don't know. That is not the way it is typically described. Typically it is described as anorexia, abdominal discomfort, nausea, but those are fairly vague terms.

Go ahead. I'm sorry?

Q I'm sorry. I didn't mean to interrupt you.

A That's okay.

Q Fatigue is a symptom of digoxin toxicity, true?

MR. TABER: Objection.

THE WITNESS: It can be, yes.

BY MR. ERNST:

Q Now, would you agree that the first signs of toxicity from digoxin are typically an abnormal slowing of the heart rate?

MR. TABER: Objection, overbroad.

THE WITNESS: That is a very broad question because there is multiple indications for digoxin. So there is multiple goals for heart rate. So, for instance, if someone had a heart attack, and they were on a beta blocker and digoxin, and they were in atrial fibrillation, and their heart rate was attempted to be 60, the first thing that would happen if they got digoxin toxic is the heart rate would get under 60.

If they have congestive heart failure and their heart rate naturally was 90, then it would take a lot of digoxin before it got under 60. So a lot would depend on the indication for the digoxin, the patient's medical conditions, and other medicines.

BY MR. ERNST:

Q What happens, Doctor, if you have an abnormally slow heart rate and your heart just slows to the point that it doesn't furnish enough blood to your brain? Does that, then, cause dizziness?

A That is also a broad question because people with very strong hearts, they can actually have a complete dissociation between their atrium and ventricle and go into what's called a ventricular escape, which is 40 beats a minute, and some of them

actually feel fine. People with a very bad heart, they can actually die from a heart rate of 40.

So some people would be symptomatic. Some people could die. It really depends on the patient.

If you stand up real fast, you are going to get dizzy. So people that have bradycardia that is drug induced or toxin induced, they would certainly be dizzy when they stand up quickly or when they are moving around.

Q What if a person goes to bed and has bradycardia at night?

A It depends. A lot of people actually have bradycardia at night. When you are relaxed, your heart rate sometimes goes down. So it really depends.

Q Isn't it true that digoxin toxicity can lead to bradycardia?

A Yes, it can lead to bradycardia.

Q And if you assume that Mr. McCornack had bradycardia after he went to bed, his heart rate could have slowed, and he would have died of sudden cardiac arrest; isn't that true?

MR. TABER: Objection, speculation.

THE WITNESS: No. Actually, even making your assumptions, I wouldn't assume that because there

was no evidence that his left ventricle didn't pump well. So I think a guy at his age, with a normally pumping left ventricle, could handle -- what happens is when your heart gets really slow, the ventricle takes over the pacemaker. So people's heart rates don't go down to zero.

All of a sudden the ventricle takes over, and it usually pumps around 35, 40, 45, and I think Mr. McCornack laying down, doing nothing, a heart rate of 40 or 35 or 45, he probably wouldn't have woke up. It wouldn't have bothered him.

So I actually don't think that bradycardia would have caused him to die in his sleep. In him. I'm not saying it couldn't be possible in some patients, but in him specifically.

BY MR. ERNST:

Q Well, what patients would it be possible in? What patients are we talking where you have bradycardia, and your heart slows to an extent, and you go unconscious and you die?

A Well, you assume --

Q Why can't that occur?

A -- you assume that you are going unconscious, and that's the part that doesn't

necessarily happen. So the cardiac output that goes to the brain is the heart rate times the amount of blood that is pumped each beat. So if you have a heart that pumps a lot for each beat, some people can have more cardiac output at a heart rate of 40 than other people have at 80.

Like I used to play tennis. Bjorn Borg, his resting heart rate was in the 40s. When he was standing, walking around, his heart rate was in the 40s because his heart was so strong that 40 times a good ejection fraction was more than enough blood flow.

The patient that could die is someone who has congestive heart failure, who is only pumping a small amount of blood each beat, and then when the beats go down, then they are in trouble and they could die. So it really depends on the patient.

Q So you would want to look at the patient's history and actually have seen the patient before their death in order to reach those conclusions, true?

A Well, you can get some of that from the autopsy because people that have like ischemic cardiomyopathy, they have very thin ventricles, and you can see heart attacks, prior heart attacks. So

from an autopsy, you can actually get an idea about healthy function, but ideally --

Q But isn't it true --

A Go ahead.

Q Isn't it true that sudden cardiac arrest oftentimes shows no symptomatology in the heart itself upon autopsy?

A No signs in the heart, you mean, not symptoms? No findings; is that what you mean?

Q Right.

A Yes. Sometimes in sudden cardiac death, they do an autopsy, and they don't find anything.

Q Right.

And with digoxin toxicity that causes sudden cardiac arrest, they would not find anything; would they?

A It depends on what happened when the patient became digoxin toxic. If they had ischemic heart disease, and the heart rate got low, then they could have a heart attack, and you can see the heart attack, even though I still could blame that on digoxin. If they had a ventricular tach arrythmia and died suddenly, then no. So it actually depends on what did the digoxin do premortem that caused the person to

have sudden cardiac death.

Q Right.

And digoxin does cause ventricular tachycardia, true?

A It can, yes.

Q And if digoxin causes ventricular tachycardia, that ventricular tachycardia can occur after the bradycardia, true?

A Yes, it is possible.

Q And if that occurs where a person is toxic with digoxin, they have bradycardia or slowing of the heart rate, then they have ventricular tachycardia leading to sudden death, at the time of the autopsy there would be no findings in the heart, true?

A No, I wouldn't say there would be none, but there could be none, yes. I don't know if there wouldn't. It depends on the patient.

Q Now, in the autopsy of Mr. McCornack, were there findings?

A Yes.

Q And were there findings consistent with sudden cardiac arrest?

A What do you mean by "consistent" exactly?

Q Were they consistent with sudden cardiac

arrest?

MR. TABER: He has asked you to define the word. I think if you would be so kind as to define what you mean by "consistent with", Don.

THE WITNESS: Do you mean that like medically or legally?

MR. ERNST: Medically.

THE WITNESS: Well, medically consistent means is something possible, and the answer is yes; but legally, I thought it was the more-than-a-50-percent thing.

MR. ERNST: Oh, you are going to the more-than-50-percent thing?

BY MR. ERNST:

Q So my next question is, Doctor, do you have an opinion as to whether or not Mr. McCornack had ventricular tachycardia?

A My opinion is that is my best reasonable guess.

Q All right. Now, just for the record, if you were to explain to a layperson what ventricular tachycardia is, what would you say?

A Ventricular tachycardia is when -- well, ventricular tachycardia is, by definition, when a beat

comes from the ventricle. Normally, a beat comes from the atrium. It is when beats come from the ventricle, and they are coming fast, and the rate could be 150, 200, something like that, and the ventricle actually cannot pump at that rate; and because it can't pump at that rate, although it is trying to beat, and there is impulses at that rate, it can't pump, and therefore there is no blood flow, and that could kill someone, and that's different than ventricular fibrillation where it is trying to beat so fast that it is just vibrating.

Q So we have already established that ventricular tachycardia can be used by digoxin toxicity, true?

A True.

Q And digoxin toxicity can also cause bradycardia, true?

A Yes.

Q And so in Mr. McCornack it is your opinion that ventricular tachycardia led to sudden cardiac arrest, true?

A That's my best guess, yes.

Q And that is entirely consistent with digoxin toxicity; isn't it, Doctor?

MR. TABER: Objection.

THE WITNESS: There are a number of things that can cause -- the reason I'm not saying that is because we are talking about Mr. McCornack, and I don't think Mr. McCornack had digoxin toxicity.

So in Mr. McCornack the answer is no because I don't think he had digoxin toxicity. In a patient who is digoxin toxic, the answer is yes. I don't think he had digoxin toxicity.

So in a generality, the answer is yes. In him, the answer is no because I don't think he had digoxin toxicity.

BY MR. ERNST:

Q So let's just get right to it, Doctor: You don't think he had digoxin toxicity because of what?

A Because he didn't have anorexia. He seemed to not -- well, there is a couple of assumed things. Because the depositions tell me that he ate a couple good meals and was drinking, people who have anorexia and stomach discomfort tend not to drink alcohol. They can get it after they drink alcohol, but people tend not to drink alcohol when they have stomach discomfort and anorexia by definition.

He ate a good meal. He had a full day. He

wasn't complaining of anything other than bloating per his wife. So that's one piece of evidence.

The second piece of evidence is I have no lab data to suggest that his digoxin level was high. He takes diltiazem and digoxin all the time together. So although diltiazem has been known to increase digoxin levels, he was on that for a long time with reasonable digoxin levels. His diltiazem level was extremely high, and I don't believe that he was diltiazem toxic at the time of his death, and his digoxin level was extremely high.

So if I thought that he was digoxin toxic, I would have to believe he was diltiazem toxic if I would believe those three-day postmortem lab values.

So I have no laboratory tests that suggest his level was high, I don't have any symptomatology that suggest his level was high, and therefore I don't believe he was toxic.

The last thing is I don't have any pills, according to the NMS, I don't have any pills that had a high level, and I consider him a fairly compliant patient. I don't think, from anything that I could see, that he was the kind of guy that would deliberately overdose or anything like that.

So I have no reason to believe that he took too much digoxin. All his prior levels were okay. He didn't have symptomatology. So I don't think he was toxic.

Q You are aware that there was a re-call for the digoxin that Mr. McCornack was taking, true?

MR. TABER: Objection.

MS. AHERN: Objection.

THE WITNESS: I actually recall that there was a re-call -- I'm actually assuming that he must have gotten some batch or lot or whatever associated with that or else we wouldn't be in court now, but that wasn't discussed with me. That's my assumption or else I don't think we would be here now.

BY MR. ERNST:

Q Well, in fact, under other documents that you reviewed, didn't you review the CVS/Caremark letter to patients regarding the Digitek re-call of May 2008?

A I believe so.

Q All right. Let's pull that letter out, Doctor. Do you have that letter with you?

A Yes.

Q All right. Let's pull that out.

Now, what is in that black book there, Doctor?

A This one here is medical records of Mr. McCornack from Lemm, Von Dollen, the two certificates of death, NMS Labs, the Caremark re-call letter, and the FDA statement.

MR. ERNST: All right. Let's look at the Caremark letter that you have reviewed there, and if you have a copy there, let's mark that as next in order, and I think that is No. 7.

MR. TABER: Let's take a break, first, though. We have been going an hour-and-a-half.

Five minutes?

MR. ERNST: Yes.

Doctor, if we take a break, I'm going to be asking you what you talked with the lawyer about during the break.

THE WITNESS: Okay. If he tells me I'm allowed to talk about it, then I will tell you what we said.

(Recess taken.)

(Document marked as Exhibit 7 for identification.)

MR. ERNST: Back on the record.

BY MR. ERNST:

Q Now, Doctor, did you talk with your lawyer during the break?

A Yes.

Q What did you talk about?

MR. TABER: Objection, work product.

Don, you know you can't ask that.

MR. ERNST: I just did.

MR. TABER: Well, he can't answer that because it is work product.

BY MR. ERNST:

Q Did the lawyer give you any advice on how to answer questions, Doctor?

MR. TABER: Objection.

THE WITNESS: No.

BY MR. ERNST:

Q All right. If a patient comes into your office as a treating physician, and claims that they are fatigued and bloated, would that give you cause to believe that they would have a gastrointestinal issue?

A Yes and no. The fatigue is a very non-specific complaint. So I wouldn't necessarily tie fatigue in as a gastrointestinal complaint, but bloating is, by definition, a gastrointestinal

symptom. So yes on that part.

Q A gastrointestinal symptom is an indication of digoxin toxicity; isn't it?

MR. TABER: Sorry. Objection.

THE WITNESS: I would go backwards on that and say some of them are.

BY MR. ERNST:

Q So some gastrointestinal issues are digoxin related, true?

MR. TABER: Objection.

THE WITNESS: Can be digoxin related, yes.

BY MR. ERNST:

Q And therefore, by definition, bloating can be a gastrointestinal issue and caused by digoxin toxicity, true?

MR. TABER: Objection.

MS. AHERN: Objection.

THE WITNESS: I actually have not read about it specifically, bloating per se.

BY MR. ERNST:

Q I'm not asking about the literature. I'm asking about you as a clinician.

If a person said they were bloated, that's a factor that you would consider as a gastrointestinal

issue; isn't that true?

A The answer is, yes, I would consider bloating a gastrointestinal issue.

Q And gastrointestinal issues, as we have already talked about, can be caused by digoxin toxicity, true?

MR. TABER: Objection, overbroad.

THE WITNESS: Yes, gastrointestinal issues can be caused by digoxin toxicity.

BY MR. ERNST:

Q Now, let's go back and look at Exhibit 7. There is a re-call here of the digoxin; do you see that?

A Yes.

Q And that re-call was specifically sent to Mr. McCornack; do you see that?

A No.

Am I being stupid?

MR. TABER: Objection.

MR. ERNST: No.

BY MR. ERNST:

Q There was a letter that was specifically sent to Mr. McCornack, and I thought that was Exhibit 7. The letter was specifically addressed to

Mr. McCornack saying that his medication had been re-called.

A No, I have a letter that says "Dear Plan Participant," and I wasn't advised that this was or wasn't sent to Mr. McCornack. I just thought it was a standard letter.

Q So, Doctor, are you telling me that, in all your opinions here that you have rendered, you didn't know that Mr. McCornack was sent a re-call letter that his medication may have contained twice the amount of active digoxin?

MR. TABER: Objection. And are you quoting something, Don? Because I don't --

THE WITNESS: Answer or not answer?

MR. TABER: -- because I don't see that here.

If you want him to look at the letter again, feel free, but I object to that characterization.

THE WITNESS: My answer is I assume that they received some type of notification of it or else we wouldn't be here in court, but all I had was this letter in front of me that wasn't specifically to him. But, yes, I assume that he got a letter, or his family did, whatever.

BY MR. ERNST:

Q So this is very important, Doctor: Were you given a letter, a copy of a letter, that was addressed to Mr. McCornack saying that his medication had been re-called because it may have contained twice the normal strength?

MS. AHERN: Objection.

MR. TABER: Objection.

By the way, I object to your colloquy before your question, and I would ask you to rephrase and take out your own personal comments about what is important and what is not and stick to just asking questions.

MR. ERNST: That is a violation of Pretrial Order 22.

I will have my last question reread, and I would ask that you answer the question, Doctor.

THE WITNESS: The answer is, no, I wasn't given a letter that was specifically addressed to Mr. McCornack.

BY MR. ERNST:

Q That would be an important piece of information to you to know that his medication had actually been re-called; wouldn't it?

MR. TABER: Objection.

THE WITNESS: It turns out no because I assumed that he was in that group or else there wouldn't be this lawsuit. I assumed that he was one of those people or else we wouldn't be here.

BY MR. ERNST:

Q But were you aware that his specific medication that he had in his household, that he was taking, was re-called?

MR. TABER: Objection.

MS. AHERN: Objection, asked and answered.

THE WITNESS: The answer is no. I assumed that, but I wasn't given direct information.

BY MR. ERNST:

Q Now, Doctor, digoxin has a narrow therapeutic range, true?

A Yes.

Q And for a layperson, that means that if the digoxin level is increased or decreased, it can have very significant health effects on the person taking the digoxin, true?

MR. TABER: Objection, overbroad.

THE WITNESS: It depends on what you mean by "very", but I think, yes, it has a narrow therapeutic

index, which means that there is a more-than-typical, more-than-average variation by level in risk/benefit.

BY MR. ERNST:

Q Now, if Mr. McCornack had taken a pill at 6:00 to 7:00 p.m. at night, with his evening meal, of digoxin, and it had been a double-strength pill, how long would it take for that pill to be absorbed into the body?

MR. TABER: Objection.

THE WITNESS: I'm not a hundred percent sure to be honest with you. I'm not a pharmacist. My recollection is a matter of hours by the way that it is dosed orally during loading.

BY MR. ERNST:

Q So four hours, five hours would be something that you would expect that that dosage, whatever it was, would be absorbed into the bloodstream, true?

A Something like that, yes, but I'm admitting that I'm not a pharmacist.

Q Right.

But you are a doctor that works with this drug all the time, true?

A Yes.

Q And you are -- okay.

A We dose the medication daily. So a lot of meds are dosed daily with a broad range of half lives and absorptions.

Q By the way, when you give digoxin, do you give the generic type or do you give Lanoxin?

A When I did give outpatient, I give generic. When I give inpatient, the pharmacy gives whatever they want to give.

Q So circling back, Doctor, if Mr. McCornack had ingested a pill at 6:30, and it was double the strength of the normal dose -- and, by the way, his dose was .25?

A Yes, .25 twice a day.

Q So in the evening, if he had taken a .5 pill, isn't it consistent that Mr. McCornack could have suffered bradycardia four to five hours after ingesting that pill?

MR. TABER: Just object. Don, I'm sorry to interrupt, but you did say a .5 pill just now. Do you want to change that?

MR. ERNST: If I did, I misspoke.

Assume that he took -- no, I did say .5 because his normal dose was .25. The re-call was for .5.

I will have my last question re-read.

MR. TABER: Right, but you said .5 in the evening, that's how he took it. He took two .25 twice a day.

MR. ERNST: You are right. It would be .5. Okay.

MR. TABER: Okay. Sorry.

BY MR. ERNST:

Q Assume that Mr. McCornack took a double-strength pill in the evening, okay, Doctor?

A Yes.

Q Now, it is consistent that he would have suffered from bradycardia four to five hours after ingesting the pill? It is consistent; isn't that true?

MR. TABER: Objection.

THE WITNESS: It could be possible. We could actually try to figure it out from the -- I don't actually recall his heart rates during his medical visits, and I apologize.

If he was run on the borderline -- my recollection is he was very hard to control his heart rate, but if he was being run at borderline bradycardia, 65, 70, 62, then I think that that could

be very possible. If he was running at 80 or 90, then I don't think it would be very possible.

So it really depends on his heart -- we could actually do better than guess a little bit, I think, by looking at his heart rate.

BY MR. ERNST:

Q And you look at his heart rate that he was at the last doctor visit, right?

A Yes, just to get an idea of -- not the last, just overall, was he very tightly controlled or was he not tightly controlled in terms of his heart rate.

Q Well, if, in fact, he suffered from bradycardia four hours after taking a double-strength pill, that bradycardia could lead to ventricular tachycardia; isn't that true?

MR. TABER: Objection.

MS. AHERN: Objection.

MR. TABER: Move to strike all the causation questions that are possibilities and therefore not admissible, rather than probabilities.

THE WITNESS: Answer?

MR. TABER: Yes.

THE WITNESS: I think you might be, and I might be wrong, and I apologize, Mr. Ernst, but you

might be misconstruing one of my earlier comments.

I think you are putting the scheme together, bradycardia -- I don't mean it in a bad way, a scheme, but you are trying to sequence bradycardia and ventricular tach arrythmia, which you put together. I didn't necessarily put it together.

I don't think bradycardia in the setting of digoxin toxicity makes you more prone to ventricular tachycardia than tachycardia in the setting of digoxin toxicity. So I'm not putting it together the same way you are. Is that okay?

BY MR. ERNST:

Q Would you acknowledge that, with the narrow therapeutic range of digoxin, that if Mr. McCornack ingested a double-strength pill that it could lead to ventricular tachycardia?

MR. TABER: Objection to the possibilities questions.

Go ahead.

MS. AHERN: Objection.

THE WITNESS: I would say that in terms of is it possible, anything is possible. Is it probable? One dose on a twice-a-day dosing, I think it takes four or five half lives of digoxin. Again, I would

like to qualify that I'm not a pharmacist because you might get some pharmacists that say it takes three or seven, but it takes a lot of half lives to get to a steady state, and his digoxin levels weren't very high.

So I think one dose of a double, just like missing one dose or taking one dose of a double on a BID dosing schedule, doesn't do much to the level.

BY MR. ERNST:

Q Wasn't his digoxin level varied between 1.6 and 1.8?

A My recollection is yes. If you want, I can look at all the medical reports if you are going to hold me to an exact number, but that's my recollection also.

Q Now, if, in fact -- well, let's go back and talk about bradycardia. Is it your opinion that the double dose of digoxin would cause bradycardia?

MR. TABER: Objection.

THE WITNESS: My opinion is in a patient who was borderline bradycardic to begin with, that if they took a double dose, they could get transiently bradycardic. So it really depends on what was the heart rate on the normal schedule.

If the patient had a heart rate of 90, the answer would be no. If the patient had a heart rate of 64, 65, the answer would be very possibly.

BY MR. ERNST:

Q So, Doctor, if a person suffers from bradycardia, the heart rate can actually slow enough to where they become unconscious; isn't that true?

A The answer is bradycardia in general, yes, but in this setting typically not because this is a ventricular response to atrial fibrillation. So the heart rate doesn't jump from 60 to 30. It goes from 60 to 55 to 50. Drugs that cause a complete heart block, you can jump from 70 to 40 or 35 just in one jump.

If he was suffering from bradycardia due to an overdosing of digoxin or high-digoxin level, his heart rate would just gradually go down, and people don't pass out from a heart rate of 50 or 55 or 48.

Q Well --

A Some settings, bradycardia could cause you to pass out.

Q Isn't it true that Dr. Lemm opined that if he is sleeping, he would just go to sleep, his heart rate would slow, and he would eventually die?

MR. TABER: Counsel, what page are you citing? Because we have his depo right here.

MR. ERNST: No, I'm asking you if you agree or disagree with that.

THE WITNESS: With that comment?

MR. TABER: All right. So if you are asking the witness if he agrees or disagrees with the document, you are required to show it to him. I'm invoking that requirement at this point.

If you want to rephrase your question, exclude the whole reference to the deposition, that's fine. Either way you want to go.

MR. ERNST: I will have my last question reread.

(Record read.)

MR. TABER: Objection, same basis, and if you are refusing to fulfill your obligation to give the witness the documents you are referencing, he is under no obligation to answer it.

MS. AHERN: Join.

MR. ERNST: Well, we are halfway across the country. So --

THE WITNESS: I would be happy to answer if we can find the quote from Dr. Lemm.

MR. TABER: We have his deposition right here. If you simply have a page reference, we would be happy to direct the doctor to the page. I have got the transcript right here.

MR. ERNST: Well --

MR. TABER: By the way --

MR. ERNST: You know, he read the deposition, and I want you to assume that Dr. Lemm has testified to that, okay?

MR. TABER: All right --

MR. ERNST: I want you to just assume that he did.

Do you agree or disagree with it?

MR. TABER: No, we are not going to assume that you are quoting his testimony accurately, and we are not required to. The rules are there for a reason, and we are invoking our right to see the document you are referencing.

If you want to take out the reference to Dr. Lemm and rephrase your question as a hypothetical, fine, but you can't quote a document and pretend you are not quoting it. It is up to you.

MR. ERNST: No, it is up to you. Are you instructing him not to answer the question?

MR. TABER: I'm instructing you that you are under an obligation to show us the document if you are going to quote it and ask him if he agrees or disagrees with it.

So it is up to you to either rephrase or you are not going to get an answer to the question because he is under no obligation to answer it.

MR. ERNST: No, I tell you what: We are going to go off the record for five minutes, okay?

MR. TABER: Okay.

MR. ERNST: We are going to go off the record for five minutes.

MR. TABER: Sure.

(Recess taken.)

MR. ERNST: Back on the record.

I disagree with that. Do you have a specific authority that I have to cite a page and number? And if you do, please give it to me on the record.

MR. TABER: Yes, it is in the Federal Rules of Evidence.

MR. ERNST: Where?

MR. TABER: I didn't bring my rule book with me, but if you really want to stop the deposition --

MR. ERNST: Let me tell you that you are violating Rule 22 consistently giving speaking objections and instructing the witness. So we are either going to call the magistrate or you are going to stick to the objection and that's it. What is it going to be?

MR. TABER: I'm sticking to my objection.

MR. ERNST: If you are going to stick to the objection, then you may say the word "objection", and any other speaking objections that you make, if the next one happens, I'm going to adjourn the deposition and were are going to call the magistrate; am I clear?

MR. TABER: You are coming through clear. I respectfully disagree with your elevated tone and threats that you are sending now, but it is your deposition. Please go forward, but I am going to hold you to the rules.

MR. ERNST: No, I'm going to hold you to the rules.

MR. TABER: I'm fine with that, and if I have interrupted, I do apologize.

BY MR. ERNST:

Q Doctor, I want you to assume that Dr. Lemm testified that Mr. McCornack, if he had a double dose

of digoxin, would simply go to sleep, his heart rate would slow, he would not get enough oxygen to his brain, and he would die. Do you disagree with that?

MR. TABER: No. Objection, and we are not going to answer that. It is the third time you asked it. The objection stands.

BY MR. ERNST:

Q I want you to assume that Mr. McCornack's heart rate -- or he took a double dose of digoxin at 6:00 p.m. At midnight, or 11:30, 12:00 o'clock, he went to sleep. His heart rate slowed and he died.

A Okay.

Q Do you disagree with that?

MR. TABER: Objection. Go ahead.

THE WITNESS: The answer is I disagree with that.

BY MR. ERNST:

Q Do you disagree with that? That can be answered yes or no.

A Yes, I disagree with it because what would happen is his heart rate would go down, eventually his ventricle would take over, and he would either have a junctional or a ventricular escape rhythm that would maintain blood flow, and because on autopsy it looked

like his heart probably pumped okay, I think that lower heart rate, with a normal pump, would have been sufficient to keep him alive, especially while he was doing nothing in bed.

So my understanding of digoxin toxicity is the heart rate just doesn't go down from 80 to zero. There is other mechanisms that come into play.

Q So please state for me how many autopsies you have performed.

A Zero.

Q And please state for me how many causes of death you have determined from a person dying of a cardiac issue.

A I actually don't recall because I have to give cause of death on my patients when they die if the coroner doesn't want to take them. So it actually happens relatively infrequently, but I don't know the exact number. When the case doesn't go to the coroner, they ask the primary care doctor or the service doctor to give the cause of death. So it actually doesn't happen frequently.

Q When the case does go to the coroner, would you acknowledge that the coroner has additional information that you, as a person reviewing the

records, does not have?

A Yes. They have the autopsy.

Q Right.

And the autopsy gives them additional information that you, as a clinician, and as you sit here today, reviewing the records, reviewing the materials, simply does not have because you didn't see the body and the heart?

MR. TABER: Objection.

THE WITNESS: It depends on if I got to read their report or not and how well they read -- at the time that I'm asked to give a cause of death, the autopsies are not done. So I don't have the body, nor the findings. So the answer is, yes, once they do the autopsy, they know a lot more than I do.

BY MR. ERNST:

Q And, in fact, following an autopsy, in your career, Doctor, have you ever disagreed with the coroner's cause of death?

A No, not a coroner's -- well, you asked a double question because a lot of the autopsies are done by our pathologist because we are a teaching hospital. So I don't know if you want to state that how you want to state that, but I often disagree with

the cause of death from our pathologist, but when a case goes to the coroner, once my patient's dead, I have nothing to do with it. So I wouldn't agree or disagree. But I do disagree with our pathologist's cause of death sometimes.

Q So you disagree with the pathology cause of death on a number of occasions?

A On a number of occasions --

Q On autopsy?

A -- that died in my hospital where the autopsy was done in my hospital.

Q Did any of those involve digoxin toxicity?

A I actually don't recall.

Q You mention in your report that Mr. McCornack had multiple risk factors for sudden cardiac death, true?

A Yes.

Q And is it accurate to state that one of the risk factors that Mr. McCornack had for sudden cardiac death was digoxin toxicity?

A Yes, that's on my list.

MR. TABER: Hold on. Read that back.

(Record read.)

THE WITNESS: No. The answer is no. I

apologize. I misunderstood.

I did say that digoxin, period, was a risk factor. I missed the toxicity. Just the fact that he was on digoxin itself is known as a risk factor.

MR. TABER: And just let me interject for a minute here: Whether it be because of the delay on the video conferencing or whatever, the witness and the questioner are talking over each other, and I would ask both Dr. Galanter and Mr. Ernst if you would please not interrupt each other so that we get a clean record, because there is a delay, because I can see your lips move, and you're both talking over each other, and that's going to make a bad record.

THE WITNESS: Sorry.

MR. TABER: It is all right.

BY MR. ERNST:

Q Digoxin is a risk factor in sudden cardiac death, true?

A Yes.

Q And digoxin toxicity is a risk factor in sudden cardiac death, true?

MR. TABER: In this case or in general?

MR. ERNST: You know, I'm done here. I think that we should call the magistrate. You are

making speaking objections. So I recommend that we do a conference call to the magistrate now. Are you willing to do that?

MR. TABER: It is up to you. It is fine with me.

MR. ERNST: I would like to have my last question reread.

(Record read.)

THE WITNESS: Yes.

BY MR. ERNST:

Q Now, in this case, you are aware that Mr. McCornack received a re-call notice for a double-strength medication of digoxin, true?

MR. TABER: Objection.

THE WITNESS: The re-call notice, let me look at it again. It just said that it was a batch or something. I'm sorry, Mr. Ernst. Let me look at the letter again.

Where did I put that?

Oh, sorry. This letter that I have, which is Exhibit 7, it actually refers to a prior letter. It says: "You recently received a letter from CVS Caremark about the Digitek." So I don't, as we discussed before, I actually don't have a letter that

was to him.
BY MR. ERNST:
Q Have you reviewed Dr. Heard's deposition?
A Yes.
Q And do you have that deposition with you there?
A Yes, I do.
Q I want you to go to Dr. Heard's deposition.
A Okay. Just give me one moment.
Q And go to the exhibits. Do you have the exhibits?
A I don't have it yet, Mr. Ernst.
MR. TABER: And I think, Don, I think you are talking about the --
THE WITNESS: Yes, I apologize. I don't have his deposition. It is not available yet. I have his opinion.
BY MR. ERNST:
Q Do you have Dr. Mason's deposition with exhibits?
A I don't know what "with exhibits" means, but I do have his deposition, and I can get it.
Q Why don't you pull his deposition and see if there are exhibits attached.

THE WITNESS: Is this the exhibits or no?
MR. TABER: Yes, I think it is.
THE WITNESS: Yes, I have it.
BY MR. ERNST:
Q All right. I want you to look at the exhibits to Dr. Mason's deposition, and there is a letter from Caremark in there.
A Do you know which --
Q If you look at --
A Do you know which one that is?
Q I think it is Exhibit 14, but I'm not sure.
A Okay. Thank you.
MR. TABER: There should be an index to the exhibits as well.
MR. ERNST: Yes. If you will check the index, you can get the actual -- I apologize that I'm not there. We are doing video conferencing here.
THE WITNESS: That's okay. I'm just apologizing for being slow.
Is that the last page or the beginning?
MR. TABER: The index is in the very beginning of the transcript.
THE WITNESS: Letter. Letter.
I actually don't see it in the index. 14

was a letter from you.

Do you see it?

MR. TABER: No.

THE WITNESS: You know what, Mr. Ernst? I don't see it, and I apologize. I checked 14, and that was from you, and 15 was from you. 13 says environmental. Maybe that's the FDA.

MR. ERNST: That's all right.

Let's go off the record a minute.

(Recess taken.)

BY MR. ERNST:

Q Do you have the Lemm deposition there?

A I'm sure I do, yes.

Q I want you to look at, I think it is, Exhibit 6-14.

A Got it.

Q It is a letter addressed to Daniel McCornack; isn't it?

A Yes, it is.

Q You don't recall reading this; do you?

A No. This is one of the first pieces that I got probably two-and-a-half years ago.

Q So, in fact, when you wrote your report, you didn't know that Mr. McCornack had received a letter

stating that there might be twice the approved level of active ingredient in the pill; did you?

MR. TABER: Objection.

THE WITNESS: I think I answered this before. I assume so because I assumed that's why this was a legal issue.

BY MR. ERNST:

Q You did not know at the time; did you?

A I did not know for a fact that he had received this letter. I assumed that he had received the letter because I had the other letter that was just general "Dear Participant". So I would assume that he was a participant. I'm talking about No. 7.

Q Now, would you agree with me that, in fact, looking at this letter, that, in fact, double-strength pills could induce digoxin toxicity?

MR. TABER: Objection.

MS. AHERN: Objection.

THE WITNESS: I have to -- it was old. So if you give me a moment, I will look at it, and then answer your question.

My answer would be no because it doesn't talk anything about his indication or his present dosage. So if he had CHF, his dose would have been

low, and doubling it wouldn't have put him into toxic range; and if he was high in his dosing, it could have put him into toxic range. So I don't think his letter specifically addresses his dosing or indications.

BY MR. ERNST:

Q Go to Exhibit 7.

A Okay.

Oh, sorry, that is a different thing.

MR. TABER: Take your time.

BY MR. ERNST:

Q Does Exhibit 7 define the risks, Doctor?

A Give me one second. I'm just moving to a different paper.

I don't see anything about risks here. Am I missing something?

Q In truth and fact, double-strength pills can lead to digoxin toxicity and death; isn't that true?

MR. TABER: Objection.

THE WITNESS: In Exhibit 7?

MR. ERNST: I'm just asking generically.

I will have my last question reread.

THE WITNESS: I'm sorry. Sorry about that.

(Record read.)

MR. TABER: Objection, false hypothesis.

Go ahead.

THE WITNESS: The answer is, yes, if a person were to persistently take double-strength pills, it could lead to toxicity and death.

BY MR. ERNST:

Q Going to Page 93 of the Lemm deposition, Line 7 --

MR. TABER: Did you say 83?

THE WITNESS: 93 I think he said.

MR. ERNST: 93.

MR. TABER: Okay. Thanks.

THE WITNESS: And what line, Mr. Ernst?

MR. ERNST: Line 7 through 13.

THE WITNESS: Okay. Give me a moment.

BY MR. ERNST:

Q Dr. Lemm concludes -- Dr. Lemm is the treating practitioner; you are aware of that?

A One of them, yes.

Q And Dr. Lemm states that:

"Sometimes, if one is asleep and suffering from digoxin toxicity, their heart could just slow to a level where this would become -- they would pass out and eventually die?"

And the answer is:

"A. Yes.

"Q. Do you believe that's what happened here?

"A. I think so."

A So what's the question?

Q Do you disagree with that?

A Well, I agree that that's there accurately, but I disagree with his conclusion.

Q Right.

You believe that Dr. Lemm, as a treating physician, has a reasonable basis for concluding that; don't you?

A I disagree with his conclusion. So I'm not sure if his basis or his logic is wrong, but I can't tell which.

Q Right.

So you are aware that the treating physician of Mr. McCornack, the cardiologist, and the coroner all concluded that Mr. McCornack died of digoxin toxicity? You are aware of that, right?

MR. TABER: Objection, same basis as before.

MS. AHERN: Objection.

THE WITNESS: Actually, in this sentence, I agree that Dr. Lemm is saying that this could happen,

and I know Dr. Mason and I agree that was his conclusion on his amended thing. I don't recall what the cardiologist said because I don't think they were asked -- I don't recall that they made a final statement.

BY MR. ERNST:

Q Is it significant to you that every person that has actually seen Mr. McCornack or seen his body has concluded that he died of digoxin toxicity?

MR. TABER: Objection.

MR. ERNST: Is that important to you?

MR. TABER: Objection.

THE WITNESS: I think you are saying "everyone" as multiple people. I think Dr. Mason was the only one that saw his body, and it is somewhat disturbing to me that Dr. Mason changed his mind very far apart. So I somewhat discount Dr. Mason's opinion because I don't think he was very confident about his opinion.

BY MR. ERNST:

Q All right. Doctor, let's go back and summarize some of the things that you have said.

You have acknowledged that digoxin toxicity can cause sudden cardiac death, true?

MR. TABER: Okay. Hold on.
MS. AHERN: Objection.
MR. TABER: You can't repeat your questions. When you say "summarize", if you are going to ask new questions, please go ahead; but if you are going to ask the same questions you already asked, I object, and I would respectfully ask you not to repeat because we will not summarize the same questions we have asked already.
MR. ERNST: If you have an objection, you can place it on the record.
MR. TABER: I just did.
MR. ERNST: I will have my last question reread.
(Record read.)
THE WITNESS: That's a two-part question. One is do I remember saying it and one is is it true. So do I remember saying it? I'm not a hundred percent sure, but the answer is, yes, I do say that digoxin toxicity can cause sudden cardiac arrest.
BY MR. ERNST:
Q You are aware --
MR. TABER: He is not done.
MR. ERNST: I'm going to ask another

question.

MR. TABER: No, you cut him off, and we both agreed not to do that. So let him, please, finish his answer, and he will let you finish your question. I apologize for interrupting.

Go ahead.

MR. ERNST: I thought he was finished.

THE WITNESS: It is okay.

My only statement was that I don't have the transcript in front of me, and I don't want to be caught on did I/didn't I say anything. So I will restate my opinion, I guess, if my counsel lets me, but I don't want to have to say whether or not I said something or not, because if it has to be accurate, then I have to wait for the court reporter to go back and look at it, and it will be very time consuming.

So the answer is, yes, I agree that digoxin toxicity can cause sudden cardiac arrest. What I'm not so sure about is whether I said that or not before, and if I have to know exactly, that means I am going to have to ask her to go back and look at everything I have said. I'm not trying to be difficult. Does that make sense?

MR. ERNST: Sure.

BY MR. ERNST:

Q So one of the things that I want to make sure is just make sure we have a clean record. There is no trick questions here.

I just want it clear, in a question and answer, that digoxin toxicity can cause sudden cardiac arrest.

MR. TABER: Objection, asked and answered at least five times. Please ask a new question, something that we haven't already covered in the last three hours.

MR. ERNST: Actually, it has been two hours and 15 minutes.

MR. TABER: Sorry.

MR. ERNST: Not counting breaks.

BY MR. ERNST:

Q Now, you mentioned that there was pulmonary edema that was a finding on autopsy. Do you see that?

A Actually, I didn't mention that. That I know that we didn't talk about. So I did not mention that he had pulmonary edema.

Q What significance is pulmonary edema to you?

A It really depends if it is a -- pulmonary edema to me, as a doctor clinically, there is a lot of

causes to pulmonary edema, and it helps to make a differential diagnosis for a lot of different things, and I don't want to get into that.

Postmortem, and I'm not an expert, it seems like other people were claiming that this is a finding that just occurs sometimes, and you find it after people die. So it is not something that I read about, but I can talk a long time about pulmonary edema in the live patient.

Q Here is my question: Is pulmonary edema a factor in your opinions?

A No.

Q It is true; isn't it, that pulmonary edema can be related to sudden death, sudden cardiac arrest?

A The answer is I'm not sure, but I don't think so because I think that the person dies immediately, and the pulmonary edema is a hemodynamic mechanical thing that would take a little while to occur. So I think the pulmonary edema would come after death. So death is defined when the brain -- I think the brain would cease to get oxygen prior to the development of the pulmonary edema. If someone has near death, then they might develop pulmonary edema after the near-death episode.

Q Can pulmonary edema be caused by digoxin toxicity?

A It could be caused by certain parts of digoxin toxicity.

Q And if you look at Page 3 of your report, the second paragraph from the end, you state, and I quote: "His autopsy did show pulmonary edema, but this may have been related to his sudden cardiac arrest or developed postmortem."

A Yes.

Q So is it your testimony now that pulmonary edema is related to sudden cardiac arrest?

A I think I'm having a hard time. It depends on if it is a live patient or it is in a dead patient. So my answer was you might develop pulmonary edema after you die of sudden cardiac arrest. So it really depends on if you are talking about in the live patient or in the dead patient. So my answer is in the dead patient, on autopsy, you could find pulmonary edema because of pump failure from ventricular arrythmia.

Q Doctor, you have rendered opinions here today about the cause of death, and my question to you is that sudden cardiac arrest, and the autopsy that

was performed, and the evidence and information that you have, based upon the findings at death by the coroner, are consistent with a number of things, true?

MR. TABER: Objection.

THE WITNESS: On a medical definition of consistent, yes. I can't say with a high probability of those things, but by the medical definition of consistent.

BY MR. ERNST:

Q And using the medical definition of consistent, one of those things that the autopsy findings are consistent with is digoxin toxicity; isn't that true?

MR. TABER: Objection.

MS. AHERN: Objection.

THE WITNESS: The answer is the autopsy findings without information premortem that was in the rest of the record. So if I was just doing the autopsy, and didn't have any other information about the patient, I would say, yes, but in this particular patient, based on their history premortem from the depositions and record, I would say no.

BY MR. ERNST:

Q So did you give any weight at all to the

fact that the medication that Mr. McCornack took on the day of his death was re-called because it may have been a double dose?

MR. TABER: Objection.

THE WITNESS: The answer is no because it was tested, because his pills were tested, and none of them were double dose.

BY MR. ERNST:

Q Well, you are aware that the double dose wasn't consistent throughout the pills that were produced by Actavis; aren't you?

A Not in the factory, but since I don't know what actually got into his bottle -- I don't know if it actually got out of the factory. I don't know how it would have come in the bottle, like all of them together or half of them. I don't know. I haven't read anything about it.

Q Well, you are aware -- I'm sorry.

You are aware that the re-call was because there were random pills out there that might have been double dose; aren't you?

MR. TABER: Wait. Don, you know ethically, as a lawyer, that that is absolutely false. So please rephrase the question. You have no basis to say that,

and do not try to trick this doctor with something like that.

MR. ERNST: All right. We are adjourning the deposition. I'm calling the magistrate. You have violated Rule 22 consistently, and I'm adjourning this deposition. I reserve the right to reset it. I'm going to make a motion against the kind of interruptions that you have made.

Do you want to make the call right now jointly? I'm just going to adjourn the deposition at this particular point in time, and I will make the appropriate motion.

I'm tired of this.

Doctor, we have been going for two hours and 20 minutes. I have been consistently interrupted with violations of Rule 22, and it is a violation. I'm going to adjourn this deposition. I'm going to ask that the portion of the deposition be typed up.

You will be given an opportunity to read and correct any portion of the deposition that you have at this time, and I'm going to be making a motion to the Court to take another session of your deposition, okay?

MR. TABER: No. Let me say my piece. May I

now respond, since this is directed at me and not him?

The Doctor is here --

MR. ERNST: The fact is I'm adjourning this deposition, and you may place anything on the record that you wish.

MR. TABER: Okay. I will do that right now. It is 12:30 Central Time. The Doctor, at your request, has set aside the entire day to answer questions. He has done so. If you adjourn this deposition, it is your choice, but you do not get a second crack at him.

He is here and ready, willing and able to answer any appropriate questions that he is asked, and we are not agreeing, by any means, to a second deposition and will not produce him willingly for a second deposition.

It is your call. If you want to walk away, it is your choice, but this is your chance.

MR. ERNST: The point is that you continually are interrupting, coaching, and making statements that are inappropriate in violation of Rule 22. I'm adjourning this deposition. I'm going to be making a motion to the Court.

Doctor, I will pay you for your time. If

you submit a bill to your counsel, we will pay it promptly, okay? And we reserve the right to have this deposition.

Again, I didn't expect it to go as long as it did, but I refuse to continue with the kind of interruptions that we have had.

Thank you very much. Have a good day.

MR. TABER: And before the deposition is off the record, let me say that if you want to call the magistrate right now, I'm absolutely comfortable with that, ready, willing and able, and I'm very comfortable with the appropriateness of the objections that have been made.

If you disagree, it is at your own peril because we have plenty of time, and we are ready to continue, and if you choose not to, that's up to you.

If you have specific questions that you believe he has not answered somehow because of my interruptions, then I would suggest that you ask him right now while he is here and able.

MR. ERNST: Do you have the number for the magistrate, counsel?

MR. TABER: I don't, but if you want to call her, go right ahead. You have got a computer right in

front of you. Just check the Southern District of West Virginia, and I'm sure there is a number right there.

I know that Judge Stanley has taken calls in depositions before and has said that she would very much be able to do that.

(Brief pause.)

MR. TABER: Do you want the court reporter to keep typing, which is fine with me, because she is right now?

MR. ERNST: It is fine.

MR. TABER: Okay. It is your transcript.

MR. ERNST: And I'm going to be asking the court reporter to read my last question and the objection.

MR. TABER: Sure.

(Brief pause.)

(Whereupon, a conference call was placed to Judge Stanley's chambers.)

JUDGE STANLEY: This is Judge Stanley.

MR. ERNST: Judge Stanley, this is Don Ernst calling, and we are in the middle of a deposition in the McCornack versus Actavis Totowa case. We are taking the expert deposition of Dr. William Galanter.

We are doing it by video conference.

We have served a depo notice and Rule 22, and I have made this call because the last question and answer, and throughout this deposition, there have been speaking objections in violation of Rule PTO 22, and I have asked him to politely refrain.

As an example, I will give the last question and answer that was -- or the last question and the objection that was made, and I just ask the Court's direction that counsel refrain from that so we can finish this deposition.

JUDGE STANLEY: Go ahead and read.

MR. ERNST: Madam Court Reporter, can you read the last question and then the objection by the defense attorney, Mr. Ed Taber?

(Record read.)

JUDGE STANLEY: I'm sorry, the court reporter, I can't hear that. What I propose is that you put her on speaker.

MR. ERNST: Go ahead. I'm in front of the camera at this point in time. Can you reread that, Madam Court Reporter?

(Record read.)

MR. TABER: Your Honor, this is Ed Taber.

May I be heard on the point? And can you hear me?

JUDGE STANLEY: Yes, I can.

MR. TABER: Thank you, Judge. I can barely hear you, but I do want to thank you, first of all, for taking Don's call.

We are at the end of about a two-and-a-half hour deposition, and I respectfully disagree with counsel's assertion that I have been doing speaking objections throughout.

However, now that we are at the very end, the particular question -- by the way, I have not made an objection like that once throughout this two-and-a-half hour deposition, but the reason I said what I did -- and I one-hundred percent agree with Don that we are bound by the court order, and I do not habitually make speaking objections.

However, this is a statement that has been a topic of great discussion, as your Honor knows, throughout the Digitek litigation. We are now two-and-a-half years into this litigation. There has never been a double-thick tablet that was actually found "out there" as Mr. Ernst just asked this Doctor to assume that there was.

So the reason that I made that objection,

which I consider to be a very unusual objection, which should only be made in an extremely unique situation, is that the question was absolutely, as I said, false, and is designed for one reason and one reason only, which is to trick this Doctor into believing that there were double-thick tablets "out there", meaning out in and among patients, when that exact issue has never occurred, and we have done discovery on that issue for two-and-a-half years, and that has shown that what Mr. Ernst asked, with all due respect, is directly false.

The quote in the question was "You are aware," which is designed to suggest that such a thing was true, and then Mr. Ernst said "that there were random pills out there."

So the only reason that I made that objection, which I almost never intervene in a manner like that, is that it was just absolutely blatantly false and designed to trick the witness. That's all I can say at this point in time.

JUDGE STANLEY: Mr. Ernst, did you wish to respond?

MR. ERNST: Yes, your Honor, I will.

This witness had not been given -- well, was

given the re-call notice, and the re-call notice itself states: "Tablets may be double the appropriate thickness and could contain twice the approved level of active ingredient."

I think it was an appropriate question to ask, and I would not have called the Court if this had not happened on many occasions, and my best estimate would be over ten in this deposition where speaking objections have been made.

That's the reason, and I just want the rules to be followed, your Honor. That's all.

JUDGE STANLEY: Well, let me remind the attorneys of Rule 30(c)(2), that objections ought to be stated in a non-argumentative and non-suggestive manner, and that, of course, underlying that is the basic evidentiary requirement that questions have a good faith foundation in fact.

Dr. Galanter by now has heard probably more than he wanted to hear about these tablets, and I hope that you will wind this up sufficiently so as not to unnecessarily lengthen this deposition, and I assume that I will not have to talk with you all again.

Is that a sufficient direction, Mr. Ernst?

MR. ERNST: I believe that his objection was

a speaking objection. I don't believe it was anything other than that. It has repeatedly happened. If the counsel wishes to make an objection, I would just ask that he make objection, that's the statement, everything is preserved, and we move on. I would ask a Court directive on that issue.

JUDGE STANLEY: That's not the rule says. The objection is to be stated concisely, in a non-argumentative and non-suggestive manner. That's the extent of my ruling.

He obviously has the right to interpose a variety of objections as the case moves along, and then you can then take it up with the trial court, but I am not going to tell him what he can say and not say, but I can tell you both to follow the rules.

Is that clear?

MR. TABER: Yes, your Honor. On behalf of the defense, thank you for your time, and that is crystal clear, and we will do so.

MR. ERNST: Oh, that is clear. Thank you, your Honor.

JUDGE STANLEY: Thank you. Bye-bye.

(Whereupon, the conference call was concluded.)

MR. ERNST: I will have my last question reread.

(Record read.)

MR. TABER: Objection.

THE WITNESS: I'm answering?

MR. TABER: Go ahead.

THE WITNESS: The answer is no. The information I had was from the CVS, and from the FDA, and from the generic myth thing from the FDA, was that there was a risk that double-strength pills could get to patients, and that's why there was a re-call.

BY MR. ERNST:

Q Now, if there was a risk of double-strength pills, it is accurate; isn't it, that Mr. McCornack could have ingested those pills the night of his death, true?

MR. TABER: Objection.

THE WITNESS: It depends on how large the risk was, and my opinion is, since they tested a bunch of pills in his box, I think it was very unlikely.

So I guess the question is do you want a legal definition of likelihood?

MR. ERNST: I will have my question reread.

(Record read.)

MR. TABER: Same objection.

MS. AHERN: Objection.

THE WITNESS: I think, no, it is not likely within a reasonable doubt.

BY MR. ERNST:

Q Why do you say that with regard to a reasonable -- I mean, why do you say it is not likely?

A Because there was nothing that came out that said that any of those pills actually came out, and they re-called all of them, and Mr. McCornack was not, in my opinion -- again, my opinion -- suffering from digoxin toxicity. So that would mean that there was maybe one pill in a whole bottle of pills, and he would have to have been the rare patient. There is a lot of people on digoxin.

So I'm giving the legal definition of what is likely. Is it theoretically conceivable that he had a single double-strength pill in his bottle? The answer is of course. I didn't look at every single one of those pills. It is theoretically possible. That's why I was trying to ask you are you talking about a likelihood or is it conceivable. There is no way to say --

Q Wouldn't you agree that taking -- I'm sorry?

A There is no way that I could say that it is not conceivable because I don't have the whole bottle in front of me, and I couldn't look at the pill that he took that day. So I can't say that it is not conceivable.

Q Well, if, in fact, there were a double-strength pill, and he took it, it would be ingested into his body, true?

A Yes.

Q And by ingesting it into his body, and then having a postmortem blood sample of 3.6, that is consistent with a double-strength pill; isn't it?

MR. TABER: Objection. We have been over this already.

THE WITNESS: I have no idea because I can't make a premortem level in this guy based on a three-day postmortem and an axillary. There is not enough in the literature.

BY MR. ERNST:

Q And you would defer to a coroner on that issue anyway because that's his job, true?

MR. TABER: Objection.

MS. AHERN: Objection.

THE WITNESS: In this particular case, no, I

wouldn't defer to this coroner.
BY MR. ERNST:
Q And you disagree with the Vorpahl article?
A No, not at all. I think in their sample -- I don't know about anything personally. So I would have to think that their findings are what they found in their sample, but Mr. McCornack doesn't fit into their sample.
Q You are aware that the opinions of the treating physicians of Mr. McCornack factored into their point of view that 3.6 nanogram per milliliter level of digoxin, true?
MR. TABER: Objection.
THE WITNESS: I actually don't recall -- I don't recall the entire deposition of the treating doctors to be honest. I certainly agree with your comment about Dr. Lemm because you showed it to me, but I don't recall the entire deposition of Dr. Lemm.
BY MR. ERNST:
Q Now, you are not saying that the opinion of Dr. Lemm is unreasonable; are you?
MR. TABER: Objection. Which opinion?
MR. ERNST: The opinion that his death was caused by digoxin toxicity.

MR. TABER: Objection.

THE WITNESS: I'm only saying the part that you showed me. If you want me to go back to it, that he fell asleep, that part? That was on Page 93.

MR. ERNST: I will have my question reread.

THE WITNESS: Okay. Sorry.

(Record read.)

MR. TABER: Same basis.

THE WITNESS: I don't know what opinion you are talking about, but I will say that I disagree with his assumptions on Line 7.

BY MR. ERNST:

Q You know, it is okay to disagree. My point is you are not saying that his opinion is unreasonable; are you?

MR. TABER: Okay. Objection. Same basis.

MS. AHERN: Objection.

THE WITNESS: At Page 93, he says: "I think so," and it says: "If one is asleep." So I think he is more asking a theoretical question because he didn't say "My patient." He said: "If one is asleep," and then he said: "I think so." So I don't think he is saying something very strongly.

MR. ERNST: I will have my last question

reread, and I will ask you to answer it yes or no, Doctor.

MR. TABER: And, for the record, he is not required to answer yes or no. He can answer it any way he wants as long as his answer is responsive.

You understand that?

THE WITNESS: Yes. I'm just waiting.

MR. TABER: Go ahead.

(Record read.)

THE WITNESS: I would like to answer your question clearly, if you could just clarify one thing: Are you specifically talking about his opinion on Page 93, starting at Line 7? Because there are lots of his opinions in this deposition, I'm assuming.

MR. ERNST: Yes.

THE WITNESS: Okay. In my opinion, yes, I think it is unreasonable.

BY MR. ERNST:

Q And the basis for that is what?

A I don't think the patient had digoxin toxicity.

Q Okay. You've disagreed with your own pathologists in your own hospital multiple times, true?

A Yes.

Q And when you disagree with them, do you think their opinions are unreasonable?

A Sometimes yes and sometimes no. The reason I tend to disagree with them is because they don't have the premortem information. So I have the luxury of seeing the postmortem results, and I have the luxury of seeing the premortem data, and they are supposed to look at the premortem data, but they don't tend to look at it well. So that tends to be why I disagree with them. There is something that they don't know. It is not that they are not responsible.

Q Actually seeing the patient and seeing premortem data is important to you; isn't it?

A I would say seeing the patient depends on the disease, but seeing the data and the patient, if there is something relevant in seeing the patient, is important when you are trying to figure out what happened.

Q And the difference between you and Dr. Lemm and Dr. Von Dollen, one of them is that they actually saw the patient alive, being treated with digoxin, and you never did; isn't that true?

A Yes, that is one of the differences. That's

true.

MR. ERNST: I would like to go off the record for a couple of minutes and review my notes.

(Recess taken.)

MR. ERNST: Let's go back on the record a moment.

BY MR. ERNST:

Q Have you produced your entire file today?

A What do you mean by my entire file?

Q The entire file on this case, the McCornack case.

A As discussed before, no. There were some e-mails from Mr. Moriarty and Mr. Taber. Like Mr. Taber sent me e-mails on where to come for the deposition, things like that. I didn't print all those things.

Q What --

A Go ahead, I'm sorry. We are talking over each other.

Q What about the e-mails from Mr. Moriarty?

A No, I don't have them here, as I discussed.

Q Is there anything else that you didn't bring with you today?

A Yes. There was some papers sent to me, I

assume by Mr. Moriarty, not Mr. Taber. I didn't bring them if I didn't consider them interesting and include them in my opinion.

Q What papers did he send to you that you didn't include?

A I don't know because I didn't put them on the list. Again, my assumption was that my job was to include all the things that I used to make my opinion.

Q All right. So outside of the e-mails --

A I'm sorry, Mr. Ernst. Mr. Ernst, let me finish the last question. I wasn't quite done. I apologize. I just want to be completely full.

I spend a lot of time surfing the Web when I'm looking for things. So there were a lot of little abstracts and things that I looked at when I was trying to review information, as you can assume when you do legal research.

So there is lots of articles and things that I found that looked interesting from the title, and I read it and said "This really has nothing to do with anything." So there is also articles that I found, that I didn't include, because I found them, and I looked at them, and thought that they had nothing to do with anything. So I didn't include them in my

opinion. I just want to be complete on your question.

Q But if you are surfing the Web, and you found something important, you would have either printed it out or saved it electronically, true?

A Yes. I tend not to print things out, and I save a lot of stuff electronically. So I suspect that I have electronic papers on my computer that I didn't use in my opinion, that I didn't bring, again under the assumption that I was only supposed to bring things that informed my opinion. I'm trying to be as open about this as possible so you have a total idea.

Q Surprisingly, it is important that I get the e-mails and the letters from Mr. Moriarty, and it is also important that I have the materials that were sent to you by Mr. Moriarty.

Now, as far as surfing the Web goes, if you looked at an article, and you didn't think it was applicable to you, that's okay.

A Okay.

Q But I really am interested in what was sent to you by Mr. Moriarty.

A Okay.

MR. ERNST: So what I would like to do is this: Ed, how about you agree to forward the letters

and e-mails from Mr. Moriarty to me, together with the papers that were sent to Dr. Galanter, and I don't think I will have additional questions, but, if I do, I will call you and address those issues. Is that agreeable with you?

MR. TABER: Not entirely. Just so we are clear, we are not agreeing to produce the witness again under any circumstances. We think we have given you everything you are entitled to under the new rule.

In terms of the correspondence, he has already testified that you have access to everything that he relied upon, which is the standard under the new Rule 26. So if we have, for some reason, not brought, assuming they were irrelevant, letters that say: "I will see you next week at 6:00" or "Here is the Dr. Lemm transcript which is listed," I don't see how that makes any difference; but I will, Don, pass on your request to my co-counsel, and we will then decide whether there are some things that you should be entitled to that you don't have yet.

I don't think there are. I think we brought everything. We went through, at your request, the document duces tecum multiple times in order to make sure we brought everything responsive. So I thought

we did a pretty good faith job of doing that, but I will definitely pass on your request to Matt and company, and if we take a second look and think there is something else, you will have it, but I doubt that --

MR. ERNST: You know, it is interesting: You don't get to decide, unilaterally, what you produce and not produce in his file. Item 8 that we specifically requested states: "All documents, including additional materials received or reviewed, tangible things, data or writings that were relied upon, examined, considered or rejected in preparing reports in the MDL Digitek litigation."

Now, if, in fact, Moriarty sent him materials that he didn't consider, I really want to know what that is, and rather than terminate this deposition, I'm going to adjourn it because Items 2, 3, 4, 5 and 8 have not been produced.

So we may agree to disagree, and I'm going to want that material, and I'm being generous in saying, if you send it to me, I may or may not wish to take further deposition, but I want to have it to look at, and it is my and my client's right.

So I'm going to adjourn this deposition. We

are going to type up this portion of the transcript, and then you can discuss this with Mr. Moriarty, and we will meet and confer either later today or tomorrow or Friday if that's agreeable with you.

Do you want to meet and confer Friday at 11:00?

MR. TABER: No, I'm actually not back into town until after Friday, but I just respectfully disagree that we have not produced everything that we are obliged to. Your discovery request is still subject to the rules, whether you ask for something or not, and I do not agree to adjourn the depo. Our position is you get one crack at the witness. This is your opportunity, and if you adjourn it, we do not agree to produce him again.

If you have any more questions --

MR. ERNST: I want the documents to question him with, and I may not have questions. So I'm adjourning the depo. So let's be done, and, adjourning it, we reserve our rights on these issues, including your speaking objections. So why don't we type this up into a booklet.

Doctor, you have a chance to read and review. Do you want to waive signature? You don't

have to review it if you don't want to.

MR. TABER: We have talked about it, and he does not wish to waive. He will review the transcript.

MR. ERNST: That's fine. I would like to have this transcript --

MR. TABER: Are we still on the record?

MR. ERNST: Yes, we are still on the record.

That's fine. How do you wish to handle the transcript being sent to him?

MR. TABER: We will do whatever the court reporter normally does.

MR. ERNST: Well, for the court reporter, I'm going to want his transcript, and I'm going to want it to use in opposition to the motions that are going to be filed today.

So, Madam Reporter, how soon can we have this transcript? Can you have it to me by next Monday?

THE REPORTER: Monday morning.

MR. ERNST: Perfect.

MR. TABER: Hunter, any questions on your end?

MS. AHERN: No.

MR. TABER: Any more questions on your end, counsel, for Plaintiff?

MR. ERNST: Hold on one second.

(Brief pause.)

MR. ERNST: Okay. We got a couple more questions here. See, this is what happens.

MR. TABER: Okay. Fire away.

BY MR. ERNST:

Q Doctor, do you have any issues with the test that was performed by NMS showing the digoxin level of 3.6 nanograms per milliliter?

MR. TABER: Objection.

THE WITNESS: No, I don't know the company. I assume that they are reliable. I have to assume it is okay.

BY MR. ERNST:

Q All right. The next couple of questions: If bloating or nausea is a clinical sign of digoxin poisoning, if McCornack was asleep, would he have reported nausea?

MR. TABER: Objection, compound.

THE WITNESS: Yes, there is actually three questions there. So I would say the first question is bloating is not typically described, but nausea is

typically described. That's the answer to the first question.

MR. ERNST: Okay.

THE WITNESS: To the second question, it would be to the degree. Many people wake up from their sleep to throw up when they have food poisoning or something like that. So I would say the degree of the nausea would decide whether it is bad enough to wake someone up in the middle of their sleep. So sometimes nausea wouldn't wake people up and sometimes it would.

BY MR. ERNST:

Q And if Mr. McCornack had nausea as a result of digoxin toxicity, it never would have been reported; would it?

MR. TABER: Objection.

THE WITNESS: It would be hard to say if it was mild nausea. Only after he went to bed, his wife wouldn't have been able to report it. If it was more than mild nausea, he probably would have gotten up from bed to throw up, and I'm just assuming his wife would probably know about it. If it occurred before he went to bed, his wife would probably know about it.

BY MR. ERNST:

Q But we don't know because he was asleep when he passed, true?

A Well, we don't know about the after falling asleep. If he had nausea before falling asleep, he might have told his wife, he might not have. If he threw up, his wife would probably know. So the answer is it depends. The answer is, yes, it could not have been known by his wife and in some instances it could have been known by his wife.

Q Now, the same question with regard to vision problems: If he had digoxin toxicity the night that he died, his vision problems may have occurred after he went to bed or the vision problems stemming from the bradycardia could have occurred after he was asleep; isn't that true?

MR. TABER: Objection.

THE WITNESS: By definition, no, because vision is a perception. So when you are asleep, you don't see. So I don't think he would have a vision problem.

BY MR. ERNST:

Q So if a person has dizziness or vision while they are in bed asleep, they would be unable to

self-report it; isn't that true?

A I don't know if it really even exists because you don't see when you are asleep. You know what I'm saying? I don't know if there is -- I don't know what it means to have a vision problem when you are not looking at something.

Q Right.

You are aware that digoxin toxicity can present a host of symptoms, and sometimes it just presents with nausea, sometimes it presents with dizziness, and sometimes it just presents with sudden cardiac death; isn't that true?

MR. TABER: Objection.

THE WITNESS: In general, not specific to this patient, but, yes, I agree with that.

MR. ERNST: Okay. Thank you very much, Doctor. We don't have anything else.

THE WITNESS: Okay. Thank you.

MR. TABER: I have just one set of questions to respond to that last inquiry, Doctor.

E X A M I N A T I O N

BY MR. TABER:

Q How common in your experience is death from digoxin toxicity?

MR. ERNST: Objection.

THE WITNESS: Well, in the paper we published, they found that it was about .1 percent of hospital admissions were for digoxin toxicity.

MR. TABER: Death is my question.

THE WITNESS: And I will get to that.

And the majority of the patients don't die. So as a discharge diagnosis in the hospital, it would be a very, very rare occurrence. That's the statistics.

Me personally, I have never seen a patient die from digoxin toxicity. So I don't really have an experience to put any number on it because I have never seen a patient die from digoxin toxicity.

Q How many years have you been practicing medicine?

MR. ERNST: Objection.

THE WITNESS: As a licensed attending, 15 years.

MR. TABER: No further questions.

MS. AHERN: No questions here.

MR. TABER: Any more questions from the Plaintiff?

MR. ERNST: Just a moment.

F U R T H E R E X A M I N A T I O N

BY MR. ERNST:

Q Would you agree that postmortem redistribution of digoxin, that there is disagreement among experts in the field?

MR. TABER: Objection, overbroad.

THE WITNESS: I would say -- I don't know who an expert is, but I would say the papers I looked at had disagreement. Some of the papers said you really cannot determine levels premortem, and certainly that one paper, which we have been talking about, suggested you can determine premortem.

I think it has to do with how well you read the statements and what conclusions you draw. So you can always infer things in one cohort of patients and one experiment. The question is whether you can transpose that onto other patients I think is the difficulty.

BY MR. ERNST:

Q You would acknowledge there is disagreement amongst experts as to whether or not you can compute pre-death levels of digoxin from postmortem testing?

A Assuming that the papers I read are from experts, the answer is, yes, I think there is some

disagreement.

Q And none of that, in your opinion -- disagreements are common among experts, but that doesn't give rise to the level of unreasonableness; does it?

A Say it again? The level of unreasonableness?

Q Yes.

You don't think somebody is unreasonable because they say: "Well, I think it is premortem blood levels in particular," right, based upon the literature out there; do you?

MR. TABER: Objection.

THE WITNESS: In this particular case, I do, because there is no literature on patients who have been dead for three days and drawing their blood levels. I don't know what to make of it because it is three days' old. So even if you believe that paper, it would only apply to patients whose blood had been drawn within a day or ten hours as a mean.

So I'm going to finish my statement: So I think it is scientifically unreasonable to assume that you can --

MR. ERNST: Objection. There is no question

pending.

THE WITNESS: I'm finishing my answer.

MR. ERNST: It is unresponsive.

MR. TABER: He is finishing his answer.

THE WITNESS: I'm finishing my answer because you guys started talking to each other.

MR. ERNST: Well, there is no question pending.

Before you are going to answer your question, why don't you have the last question reread, because it is non-responsive.

MR. TABER: Go ahead and finish your answer.

THE WITNESS: You are asking me if it was unreasonable -- that was the question, as I recall it -- and I think it is unreasonable because the patient, in our case, didn't match the patients in any of the studies that looked at this. So I don't think it is reasonable to make guesses about something that you can't find in the literature.

MR. ERNST: Objection. Preserve a motion to strike.

BY MR. ERNST:

Q It is reasonable that Mr. McCornack, in your opinion, died of sudden cardiac death, though; isn't

it?

A Yes.

Q And it is reasonable that digoxin toxicity causes sudden cardiac death; isn't it?

MR. TABER: Objection.

THE WITNESS: That was answered before, but the answer is, yes, digoxin toxicity can cause sudden cardiac arrest.

BY MR. ERNST:

Q And it is reasonable to assume that Mr. McCornack was exposed to pills that could have been double strength; isn't that true?

MR. TABER: Objection, speculative.

MS. AHERN: Objection.

THE WITNESS: It seems that the number of pills was -- again, is it conceivable? The answer is yes. If it is legal likelihood, they found like some handful of pills out of millions of pills. So if you are looking at a number, like in some legal definition, the answer is no because it is very, very unlikely.

BY MR. ERNST:

Q Well, do you know how many pills they found? Did you know that they tested all the pills when they

were returned? Do you know if there were any testing program done?

A I have no idea. I only know what the FDA's letters said.

Q Do you know if Actavis conducted a study of all the returned pills to see if there had been any additional pills out there that had been double strength or weren't double strength?

A No, I have not seen such evidence.

MR. TABER: Objection. Hold on.

BY MR. ERNST:

Q So you really don't have a foundational basis to make any opinions with regard to whether or not double-strength pills were applicable in this particular case; do you?

MS. AHERN: Objection, argumentative.

MR. TABER: Objection.

THE WITNESS: I do have a basis. The FDA said were 20 double-sized tablets in a sample of approximately 4.8 million tablets. That's from the Facts and Myths About Generic Drugs. So that is the basis of my opinion because that's about all I have.

BY MR. ERNST:

Q Are you aware that Mr. McCornack got the

re-call notice after he was dead?

A I actually didn't -- I didn't see the re-call notice. So the answer is I don't recall it. I can find out because it is in Lemm's deposition.

Q Right.

And, in fact, you formulated the opinions you have before you knew about the re-call notice of the double-strength tablets; isn't that true?

MR. TABER: Objection. We have been over this.

THE WITNESS: No, that's actually not true. I saw the re-call letter, but I didn't see the one specifically to McCornack. I don't recall it. It is in my packet.

MR. ERNST: That's all I have. That's all I have. That's all I have.

MR. TABER: We will not waive signature.

Anything else, Hunter?

MS. AHERN: No.

MR. ERNST: I would like my e-mail transcript by Monday morning if I can get it.

Thank you.

Thank you, Doctor.

(Ending Time: 1:10 p.m.)

UNITED STATES DISTRICT COURT OF THE
SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

KATHY MC CORNACK, et al.,)
)
Plaintiffs,)
)
vs.) No. 2:09-cv-0671
)
ACTAVIS TOTOWA, LLC, et al.,)
)
Defendants.)
_____)

I hereby certify that I have read the foregoing transcript of my deposition given at the time and place aforesaid, and I do again subscribe and make oath that the same is a true, correct and complete transcript of my deposition given as aforesaid, with corrections, if any, appearing on the attached correction sheet(s).

____correction sheets attached.

_____
WILLIAM L. GALANTER, M.D., Ph.D.

SUBSCRIBED AND SWORN TO
before me this _____day
of_____A.D., 20__.

_____.

STATE OF ILLINOIS)
) SS.
COUNTY OF MCHENRY)

I, HEATHER PERKINS-REIVA, Certified Shorthand Reporter in and for the County of McHenry and State of Illinois, do hereby certify that WILLIAM L. GALANTER, M.D., Ph.D. was first duly sworn to testify the whole truth and that the above deposition was recorded stenographically by me, and was reduced to typewriting under my personal direction.

I further certify that the said deposition was taken at the time and place specified.

I further certify that I am not a relative or employee or attorney or counsel of any of the parties, nor a relative or employee of such attorney or counsel or financially interested directly or indirectly in this action.

In witness whereof, I have hereunto set my hand and affixed my seal of office at Algonquin, Illinois, this 8th day of August, A.D., 2011.

_____
Heather Perkins-Reiva, C.S.R. No. 084-003714